

**International Harvester  
Farm Operating  
Equipment**

**M'CORMICK-DEERING LINE**



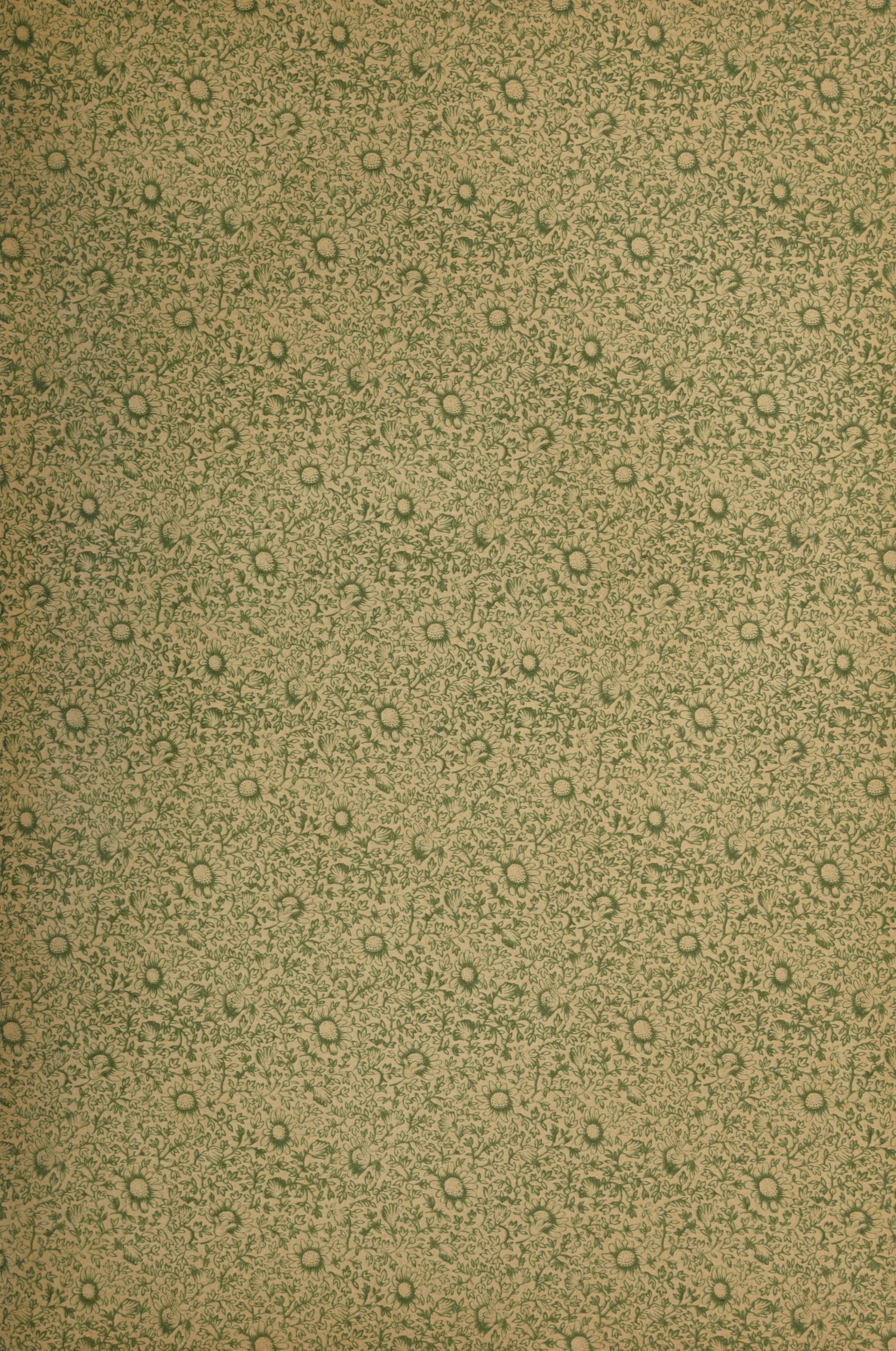


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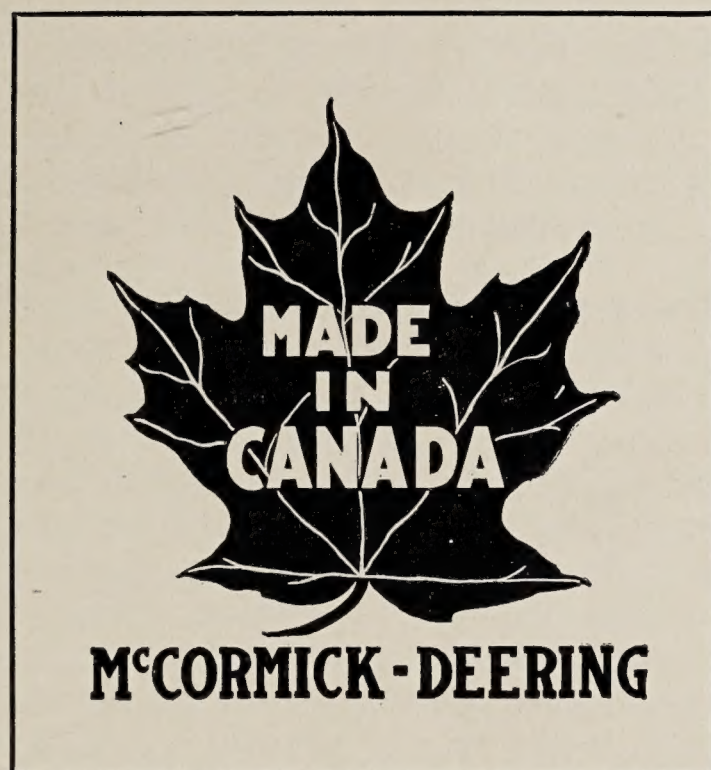


# McCORMICK-DEERING LINE

GENERAL CATALOG

No. 28

**Eastern Edition**



ISSUED BY  
**INTERNATIONAL HARVESTER COMPANY**  
**OF CANADA LTD.**  
**HAMILTON CANADA**

WESTERN BRANCHES—BRANDON, WINNIPEG, MAN. : CALGARY, EDMONTON, LETHBRIDGE, ALTA ;  
WEYBURN, N. BATTLEFORD, REGINA, SASKATOON, YORKTON, SASK.  
EASTERN BRANCHES—HAMILTON, LONDON, OTTAWA, ONT. ; MONTREAL, QUEBEC, QUE. ; ST. JOHN, N.B.



# Introductory

In offering our General Catalog Number 28 to the trade, we do so with full confidence that the McCormick-Deering line of farm-operating equipment has been brought one step nearer the ideal which is the aim of the Harvester Company. Many changes have been made which have simplified the line, resulting in benefits both to agents and farmers.

Our standardization program has made great strides during the last five years. This will be evident when it is observed that the entire line, excepting only motor trucks, is now known under the trade name, "McCormick-Deering." In carrying out this program many models, styles, and sizes of machines which to some extent were duplications, have been eliminated and various parts and features have been simplified and standardized. As the years go by, this will mean still better service to McCormick-Deering users everywhere. The standardized, simplified line will enable the agent to carry a smaller variety of machines, a more complete assortment of repairs and to render better service with a smaller investment.

Among the recent developments of the McCormick-Deering line is the Farmall tractor and the various implements made especially for use with this tractor. The reduced cost of mowing, planting, cultivating, etc., with these implements and a Farmall, made an immediate appeal to farmers, and promises to have a more far-reaching effect than any development of farm machines since the invention of the kerosene tractor. The McCormick-Deering line is the first to include this all-purpose tractor and its accompanying farm operating equipment. This new unit gives added impetus to the ever-expanding power farming movement.

After all, the acceptance of the McCormick-Deering line by farmers everywhere as the one that meets their needs for standardized farm operating equipment depends largely upon the maintenance of McCormick-Deering quality and service. It is a source of gratification to us, and it must be to our agents, that in both respects—quality and service—the McCormick-Deering line is living up to its best traditions.

The Harvester Company will faithfully adhere to its policy of always building the best farm operating equipment of which its experimental, engineering, and manufacturing organizations are capable.

**INTERNATIONAL HARVESTER COMPANY**  
**OF CANADA LTD.**

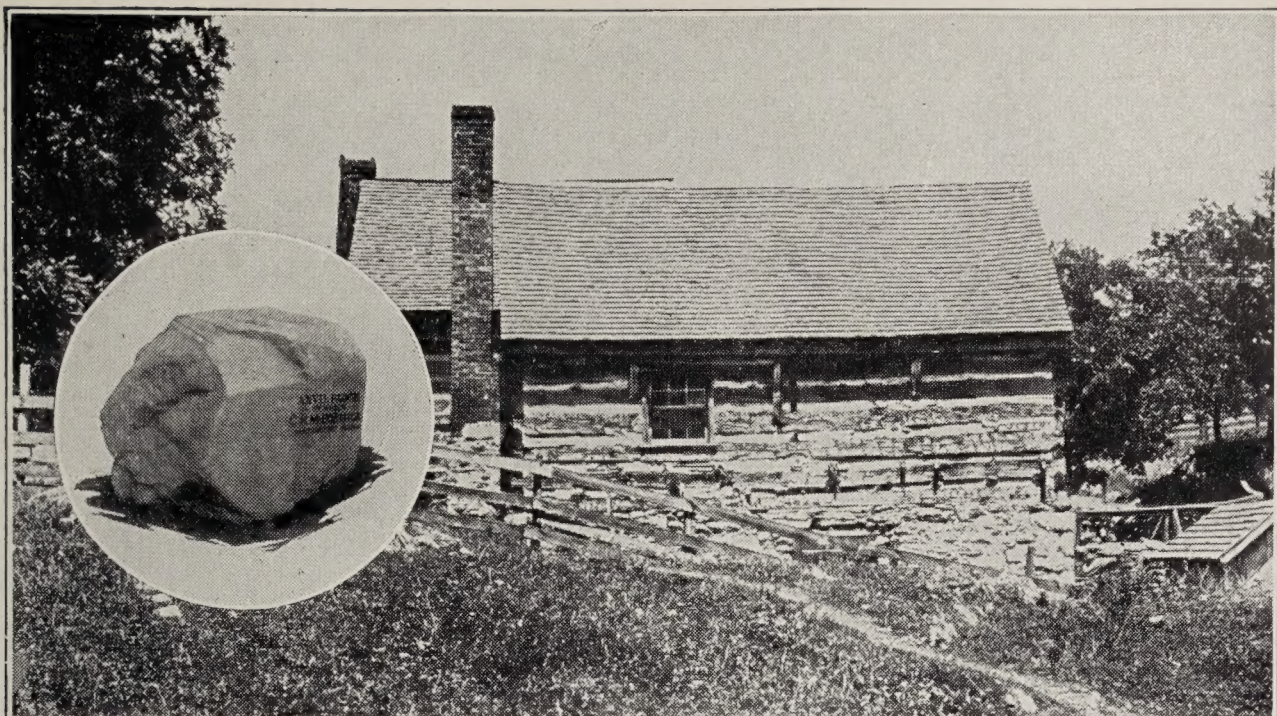
HAMILTON

- -

CANADA



# International Harvester History



BLACKSMITH SHOP, STEELE'S TAVERN, VA., WHERE CYRUS HALL MCCORMICK BUILT HIS FIRST REAPER. INSERT SHOWS THE STONE USED AS AN ANVIL.

There was one event, at least, that occurred in 1831 of which history makes but little mention although it has had a broader and more pronounced bearing upon human life, industry and prosperity than almost any other occurrence in modern history. That event was the demonstration in a Virginia oat field of the world's first practical reaper—the invention of Cyrus Hall McCormick.

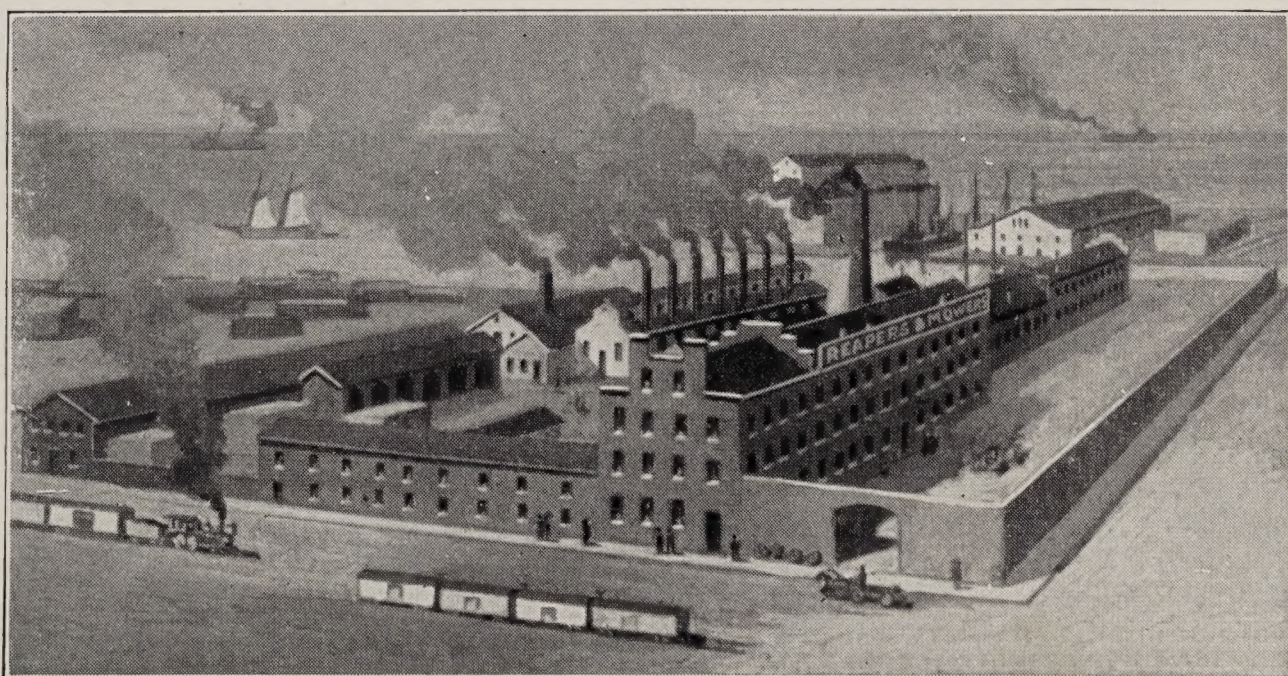
It was a crude and clumsy machine as we judge farm equipment today. Its operating mechanism, hand wrought in a backwoods blacksmith shop at Steele's Tavern, Va., did not work with the smooth precision and more-than-human efficiency of the farm machines now in use. Of course, the reaper was crude, but—it represented a wonderful idea! The idea was not crude. It was a diamond-in-the-rough—a diamond that has been ground, polished, reground and polished until it represents today the greatest help ever given the farmer in his winning fight to match

civilization's constant demand for food.

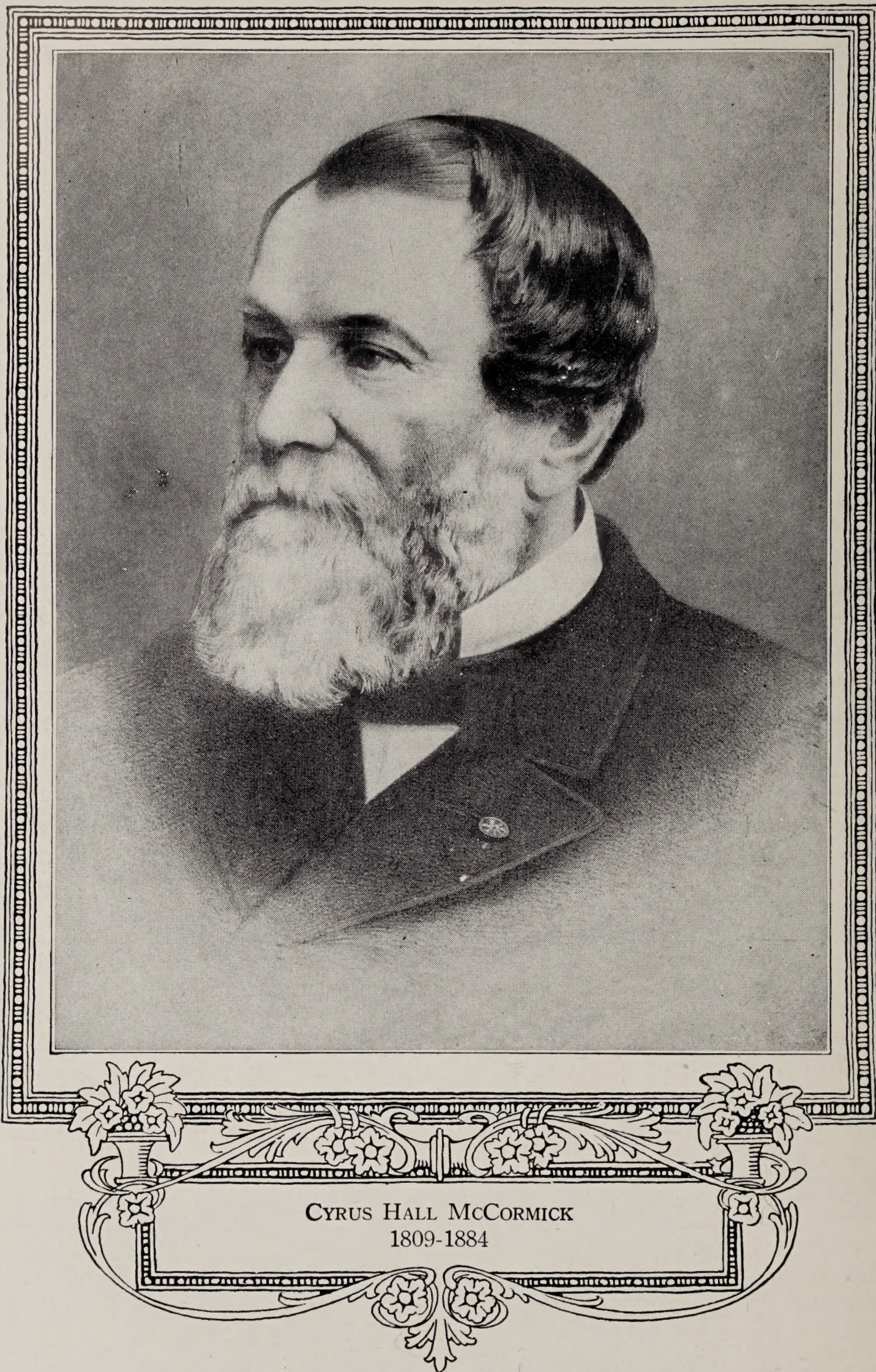
McCormick's reaper was the first concrete expression of a practical idea for reducing the labor of the farmer and multiplying his capacity for agricultural production. It performed as much work as six hand laborers in the harvest fields. The reaper opened the door to an era of fast-working time-and-labor-saving equipment—an era which is now in full swing, represented by the grain binder, the mower, harvester-thresher, kerosene tractor, automatic-lift, multiple-bottomed tractor plow, power thresher, tractor grain drill, tractor disk harrow and so on almost without end. Without these machines the world today would starve and industry would perish.

From that day in 1831 when the ambitious young inventor of the reaper braved the derision of unimaginative, visionless skeptics to demonstrate an idea—from that day to this a process of continual development has been going on in the building of farm machinery.

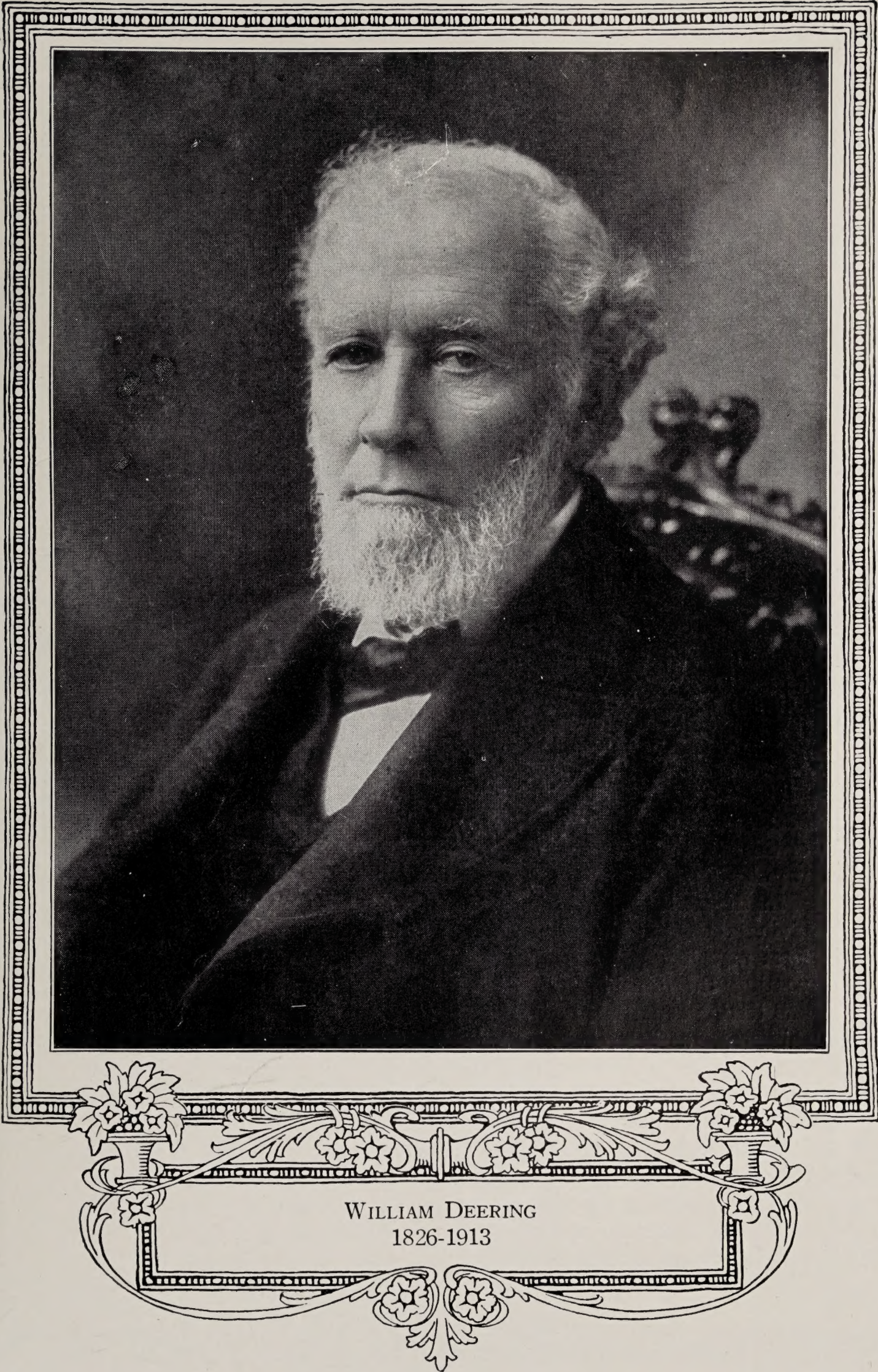
VIEW OF MCCORMICK WORKS AS IT APPEARED IN 1850. IN THAT YEAR 1,500 MACHINES WERE MADE. IN 1871 THE FACTORY BURNED DOWN AND WAS REBUILT AT BLUE ISLAND AVENUE, CHICAGO.



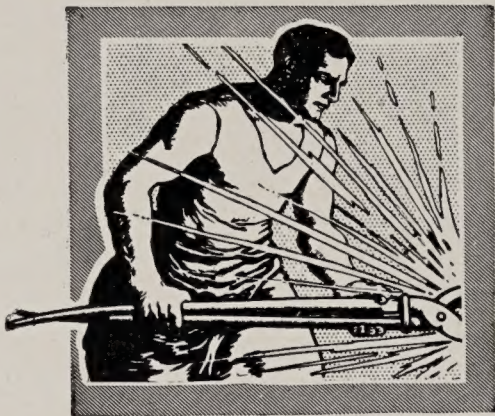












## The Man In The Factory

Standing beside a gigantic machine that towers above him, he moves a lever and the big trip hammer, weighing tons, stamps a steel forging complete—ready for the final touches. Swarthy, silently he shapes a mold, pours in the hissing, white, molten metal while the red glow reflects from him into the shadows beyond.

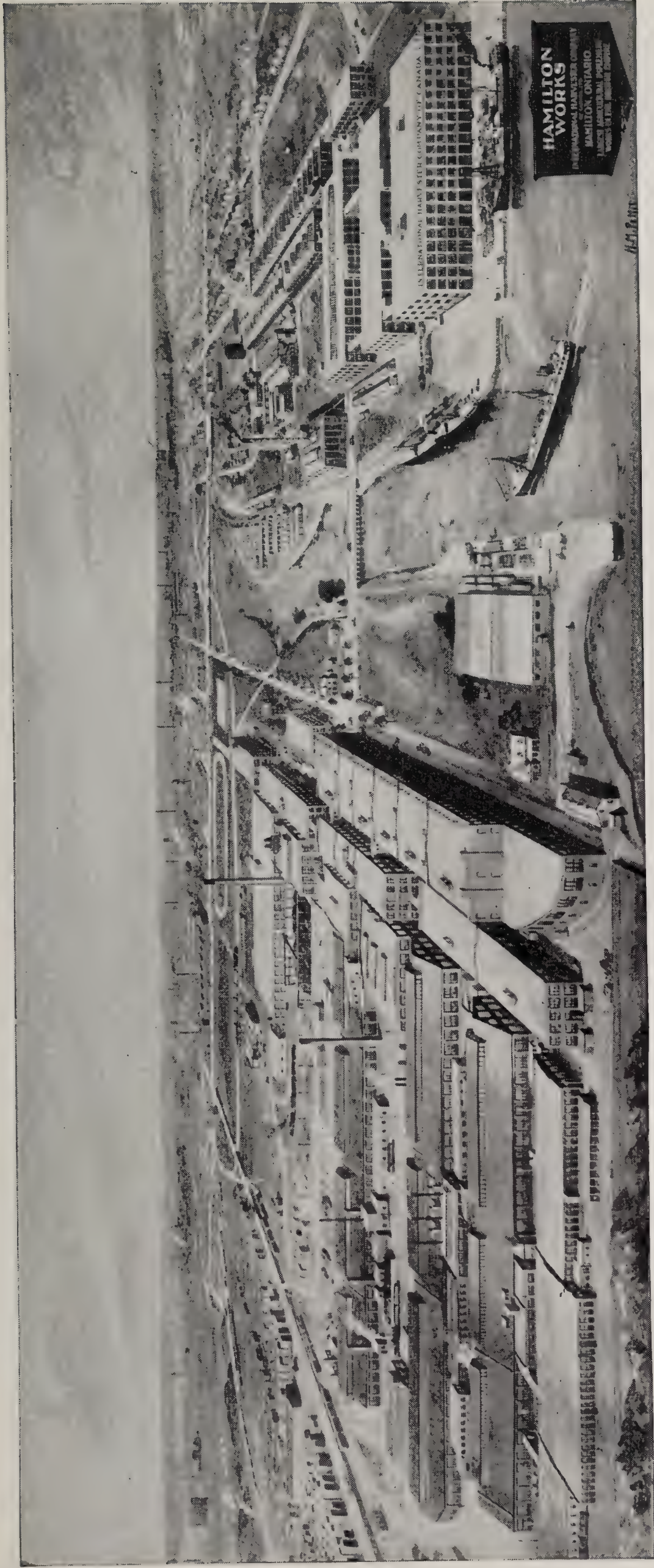
With the finest micrometer, he gauges a smooth, glistening bar of steel. Is it within the narrow limits set through the knowledge that comes only with years of experience? With test tubes and chemicals, he searches for the right proportions of the different elements for each piece of steel and iron.

The complete machine is ready and leaves his hands. He watches the reports from the salesmen, the agents and the farmers. Must a part be strengthened here? Will a change there help the implement do better work? The Man In The Factory—he is an important member of this great industry whose sole aim is to cater to the farmers of the world.

In the factories of the Harvester Company in Canada, men are giving their thoughts—their entire lives—to the building of better farm machinery. From the experimental department where the inventing, the drafting and the designing are done to the assembling and testing departments where the completed machine is prepared for shipment, the best equipment, regardless of cost, is available. Only one purpose—one thought—is before these organizations—to build the best machines that skilled men, trained engineers and improved manufacturing facilities can produce.

On the following pages, views of the great manufacturing plants of the Harvester Company are shown. It is here that The Man In The Factory is working for the vast agricultural industry of the country—producing machines that make possible, in a large measure, the continued agricultural growth and prosperity of our country.





HAMILTON WORKS OF THE INTERNATIONAL HARVESTER COMPANY, THE LARGEST AGRICULTURAL IMPLEMENT PLANT IN THE BRITISH EMPIRE

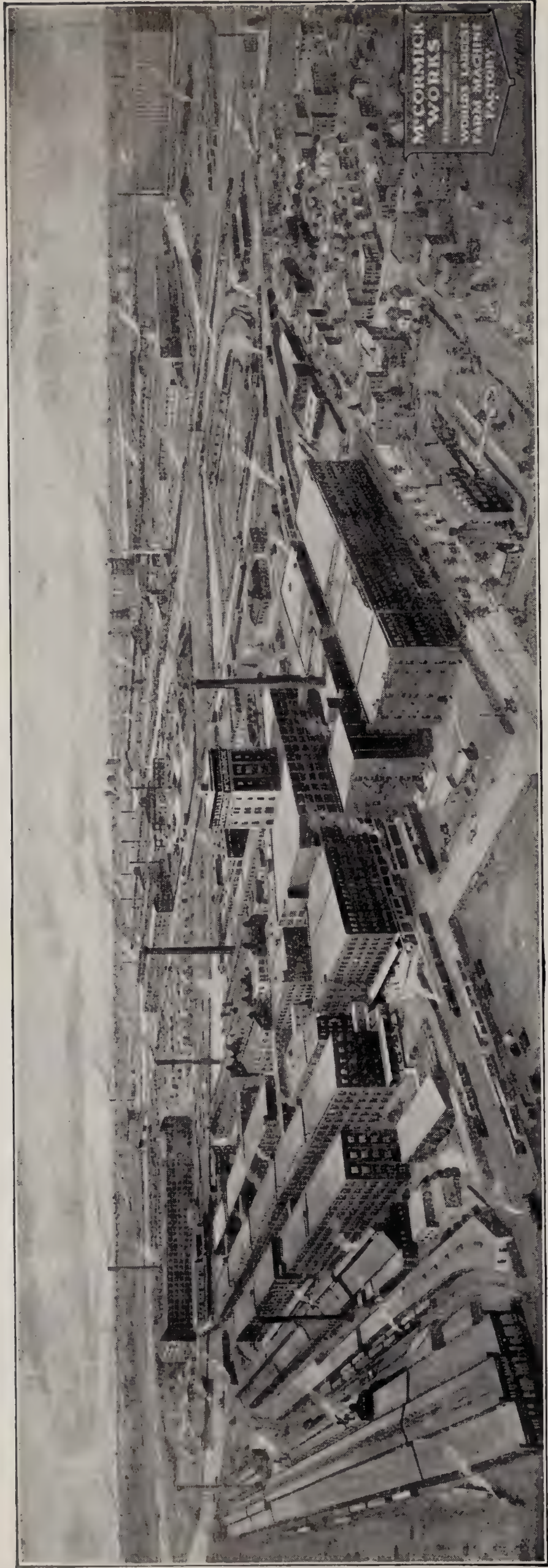
At this great factory, under normal conditions when the wheels of industry are humming throughout the Dominion of Canada, the combined works shown above give employment to between 3,000 and 3,500 men, representing approximately 15,000 people in Hamilton.

Situated on Burlington Bay at the western end of Lake Ontario are large docks at which the largest barges may load and unload. The principal entrance to the plant is at the foot of Sherman Avenue on Burlington Street. The

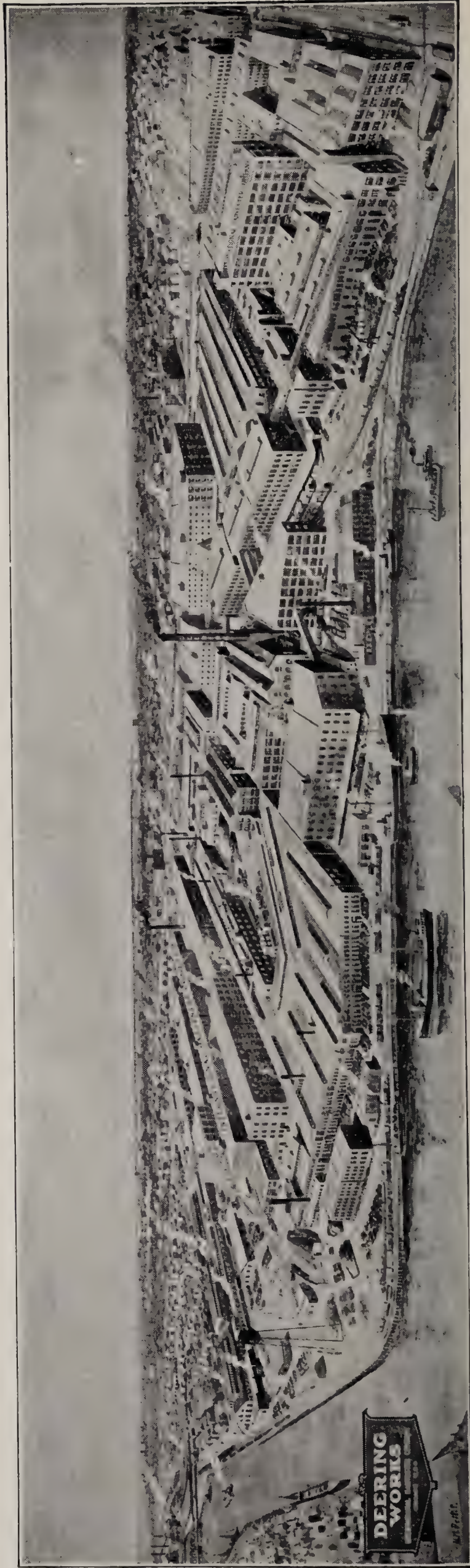
combined plants cover 190 acres of ground as follows: Harvester Works, 123 acres and the Plow Works and Twine Mill 67 acres. A total of 1,804,000 square feet of floor space is available for daily use.

In addition to the Canadian business which is supplied from this great plant, a large volume of foreign machinery has been developed to meet the special requirements of the countries over seas, and this is being manufactured in ever increasing quantities.





McCORMICK WORKS AND McCORMICK TWINE MILLS, CHICAGO.



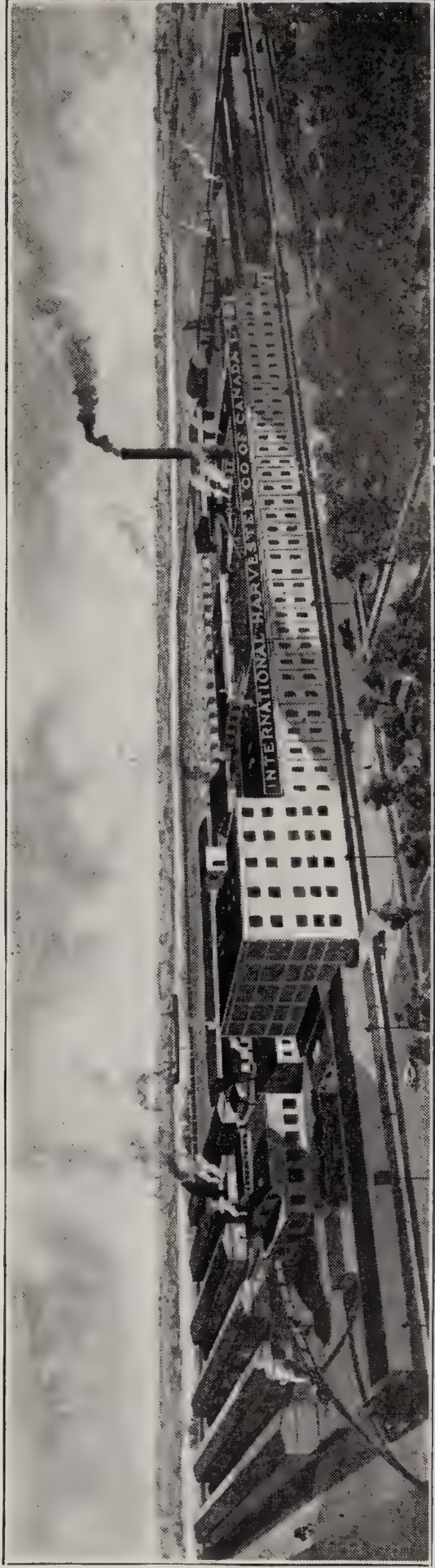
DEERING WORKS, CHICAGO.





TRACTOR WORKS AT CHICAGO  
WHERE MCCORMICK-DEERING  
10-20 HORSE POWER  
FARM TRACTORS ARE MADE

CHATHAM WORKS OF THE HAR-  
VESTER COMPANY LOCATED AT  
CHATHAM, ONTARIO. AT THIS  
FACTORY MCCORMICK-DEERING AND  
CHATHAM WAGONS AND SLEIGHS  
HAVE BEEN BUILT FOR MANY YEARS.



More recently the manufacture of the International Speed  
Truck has been transferred to this plant, and practically all

stock bodies and cabs for all sizes of International Motor  
Trucks are built in Canada at Chatham works.





# INTERNATIONAL HARVESTER BRANCH HOUSES AND FACTORIES



Are Conveniently Located in all Parts of the Dominion



## McCormick-Deering Service

Every purchaser of a farm machine is entitled to two kinds of service—service from the machine itself, and service from the organization back of it. In the implement industry today “service” is a much over-worked word and has come to mean almost anything from mere claims to the actual rendering of real service.

The International Harvester Company practices its belief that no machine should be placed on the market until it will do the work for which it was designed, and do it long enough to show a profit on the investment represented by its purchase and use. This is one kind of service, and the only kind that will insure the farmer satisfaction from the machine itself.

Years ago, when farming was done with a few simple tools, most of which were made by the farmer himself, the repair problem was easily solved. When a part became broken or worn he made a new one himself. Today the manufacture of farm machines is an industry that is a giant in size. Machines are being made in an ever widening variety, some of which are extremely complicated. To the uninformed the number of distinct parts in a modern grain binder or farm tractor is almost beyond comprehension.

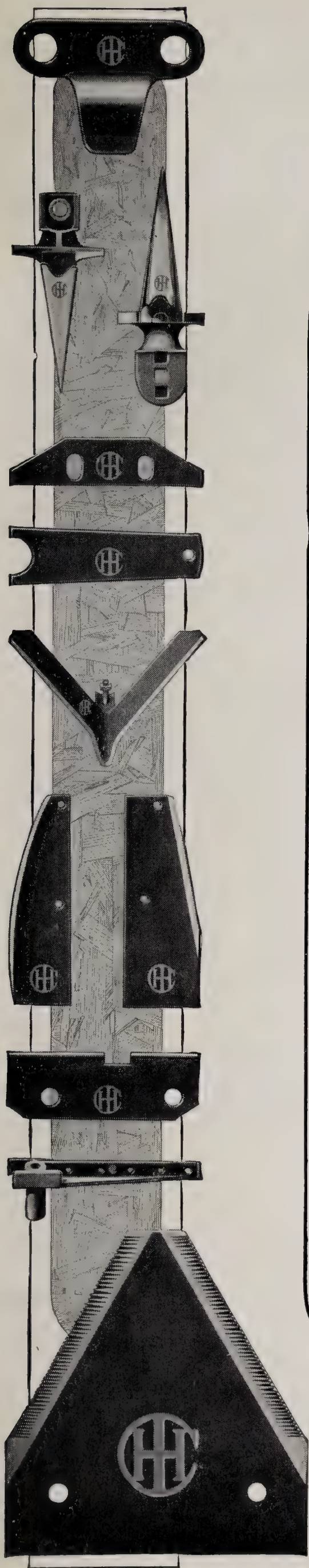
When one of these parts becomes broken by accident or fails to function properly through natural wear, it must be replaced. Every hour lost in getting the new part into the hands of the user represents a distinct money loss to the farmer. It may

mean only the loss due to idle equipment and time or, as is often the case, a partial crop loss as well. The only kind of service worthy of the name “service” is the kind that places the repair parts close to where they may be needed. Parts kept at the factory only or at a select few of the more important railway centers is not sufficient.

McCormick-Deering service brings these parts as near to the very door of the farmer’s home as it is possible to do—much closer than any other organization in the implement industry today. Thousands of dollars’ worth of repair parts are carried in stock at each of the 16 direct company branches. Each branch serves as the repair center for the McCormick-Deering agents in its territory.

Not only are genuine repair parts supplied for McCormick-Deering machines of current manufacture, but repairs are supplied for old models, the manufacture of which was long ago discontinued. So confident have Canadian farmers become of the dependability of McCormick-Deering repair service that thousands of repair orders are received by us each year for machines that have not been built for many years. The surprising part of it is, they do not ask whether or not we can supply them, they order them expecting delivery—and they get it. Such service as this affords a decided advantage to McCormick-Deering agents in building up an enviable business in their respective localities.





I H C  
TRADE-MARK  
IS ONLY  
ON THE  
GENUINE

## Why You Should Sell Genuine I H C Repairs

Selling imitation repair parts for McCormick-Deering machines is an unwise thing to do.

Few people really appreciate the many field and factory tests each part must undergo before a manufacturer can know just what materials to use, how to blend them, and through what processes they must go before the part will have just the right degree of hardness, wearing quality and elasticity. Some parts must be made extremely hard, some soft, some case-hardened, some tough, some elastic, etc. Others will embody several of these characteristics in varying degrees depending upon the work they are to do and the texture of the parts on or with which they work.

A repair part should always be an exact duplicate of the original. This it will not be unless it is made under the original formula and from the original pattern. Imitation parts may be of a different composition than the original and frequently do not fit well. The result is poor service and injury to parts adjacent to them. This faulty service usually is blamed on the machine, not on the faulty repair part where it belongs.

Genuine I H C repair parts give superior service. They are exact duplicates of the originals, made with the same care, from the same patterns, under the same formulas, and by the same processes.

Protect the interest of your customers and the service of your store by selling genuine I H C repairs for McCormick-Deering machines.

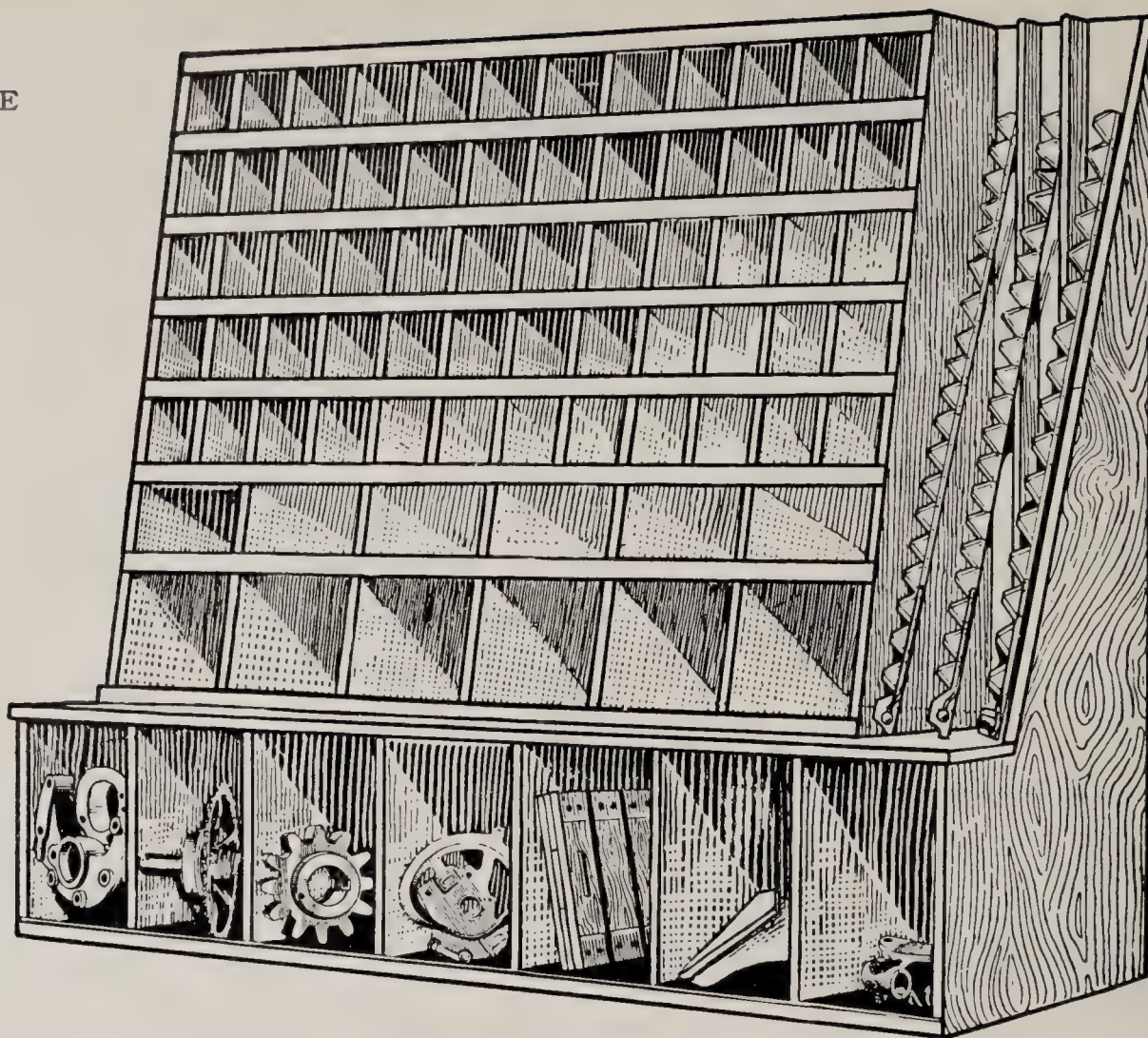
BUY THE  
GENUINE



SELL THE  
GENUINE



WRITE FOR BLUE  
PRINT OF THIS  
REPAIR RACK.



## Efficient Repair Service

Each year the repair service rendered by McCormick-Deering agents becomes a more important factor in their success. As the mechanical equipment of your customers becomes more nearly complete, your repair service should become proportionately more efficient.


Farmers appreciate good service—most of them demand it. If your repair part service is the most dependable and efficient, you have an advantage that will weigh heavily in drawing trade to your store.

Aside from keeping a complete stock of parts, there is no other one thing that makes for greater efficiency than having an orderly place in which to keep them. We show above a repair rack that can be built at small cost. It will impress your customers with the effort you are making to render the best possible service. This rack will more than pay for itself the first season in the time it will save for you.

The bins have removable bottoms, so they can be easily kept clean. Bins are provided in a wide assortment of sizes. The rack can be built any number of sections wide or high, and sections may be added as the business grows. To any agent who wants it, we will supply with-

out charge a blue print showing the number of pieces of wood required, dimensions and all other information necessary to build the rack.

If desired, you can attach a hinged door with a lock, or put drawers in one of the lower bins, in which to store the more costly parts. The blue print we supply provides for three drawers for small parts for cream separators, engines and tractors.

GENUINE McCORMICK  DEERING REPAIRS			
Machine	_____		
Cat. No.	_____	Cat. No.	_____
Price	_____	Price	_____

REPAIR BIN CARD, REDUCED IN SIZE.

Here is a repair bin card we supply free to McCormick-Deering agents. Cards measure  $1\frac{7}{8} \times 4\frac{1}{4}$  inches. Space is provided for stamping two different numbers and for marking the retail price of each part. These cards make your repair rack look neat, enable you to locate parts quickly, and avoid the time-wasting effort of looking up the price each time a part is sold. Order through your branch house.



# McCormick-Deering Advertising

## The Business Builder for Every McCormick-Deering Agent

### Advertising Tells the Facts

Before a farmer buys a farm machine he must be convinced that your particular machine is the best on the market for his purpose. He must be told the facts. He can be told in two ways—the spoken word and the printed word. Advertising is the least expensive; personal selling is most effective.

### Advertising Is Selling

Advertising will do the preliminary work—and thus reduce the time and effort required to make the sale. The International Harvester Company of Canada often is referred to as the most efficient advertiser in the implement industry. We believe in advertising because advertising is selling.

### Advertising Centered Around Agent

Our advertising is efficient because it is built around the McCormick-Deering agent. It is constantly working, developing new business, acquainting farmers everywhere with the economy and mechanical excellence of McCormick-Deering machines, and telling them where to go and see and buy.

### Local Conditions Analyzed

The production of the many different pieces of literature, advertisements, signs, posters, etc., is centered in the General Offices at headquarters. It is one thing to produce advertising and quite another thing to apply it with efficiency and economy. For this reason, each of the 16 branch house organizations includes an advertising department. Local conditions are analyzed and the application of the advertising based on an intimate knowledge of each local agent's requirements.

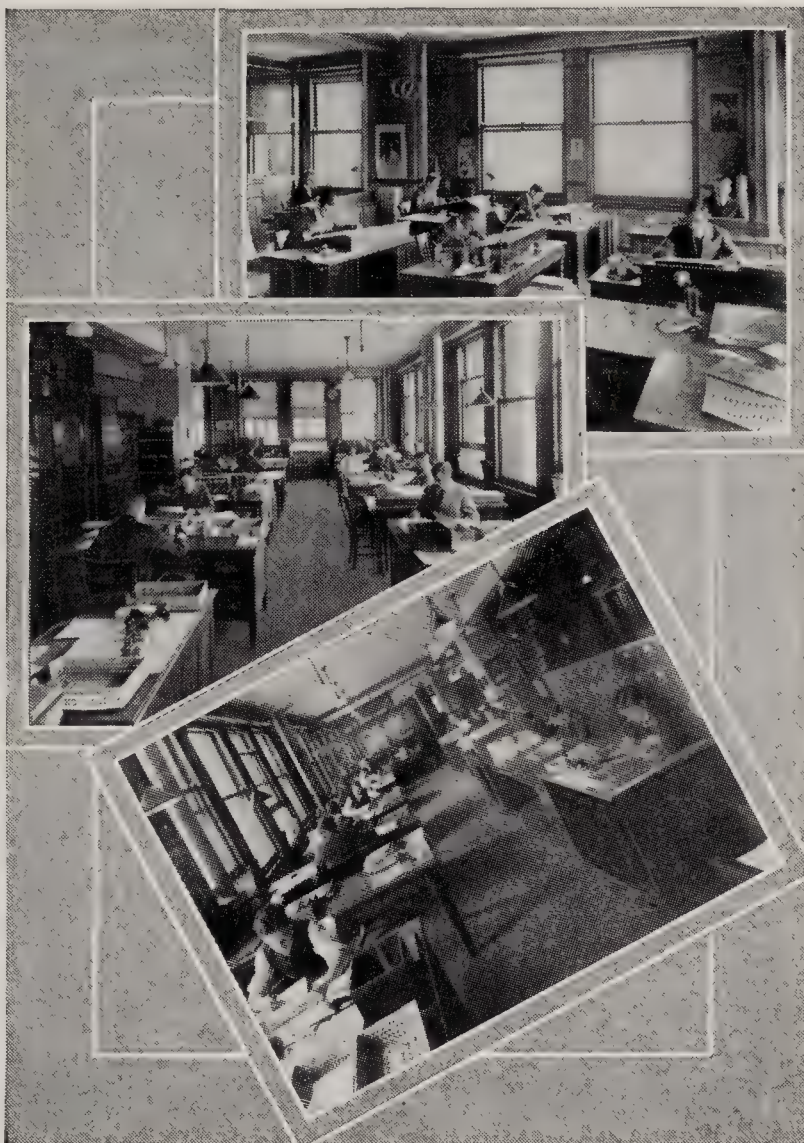
### Sales Promotion Campaigns

Advertising, to be most effective, must reach all possible users. Newspapers alone will not do it. Posters alone will not do it. In fact, no single medium will do it. Therefore our advertising embraces nearly every medium known to the advertising profession. Since the introduction of our now famous "Sales Promotion Campaigns" McCormick-Deering agents have been given a new conception of what advertising co-operation really means.

Limited space does not permit an exhaustive treatise of the many activities of the Advertising Department. We can only sketch them briefly.

### Direct Mailing Service

The agent may have personal letters, enclosures, folders, catalogs and other literature mailed to prospects in his territory. The cost of this work is borne entirely by us. These direct mailings tell the story of the machine and give the name of the agent.



ADVERTISING DEPARTMENT  
EDITORIAL, CLERICAL AND ART



VIEW OF THE MAIL ROOM  
ADVERTISING DEPARTMENT



**Poster Service**—Lithographed posters to be displayed in the store and make the sample room attractive are supplied.

**Catalogs and Booklets** — We supply agents and mail to their customers, catalogs, booklets and folders.

**Newspaper Advertising**—McCormick-Deering machines are widely advertised in local newspapers—the paper that circulates directly in the territory to the agent.

**Farm Paper Advertising**—The McCormick-Deering farm paper campaign is the biggest advertising campaign carried on by any manufacturer of farm operating equipment. Farm papers and magazines in which these machines are advertised have a circulation of hundreds of thousands of copies.

**Sign Service** — No charge is made for the big, colored warehouse and other signs supplied agents.

**Electrotypes**—Electros of any illustration appearing in our advertising will be supplied free. Complete advertisements are always at the agent's disposal without charge.

**Harvester World**—The Harvester World which is mailed monthly to McCormick-Deering agents contains many suggestions helpful in meeting retail problems.

**Motion Pictures and Slides**—Motion picture advertising reels on tractors, and

many educational reels are loaned without cost to agents. Slides on McCormick-Deering machines are supplied free.

**Tractor Farming**—Canadian Tractor Farming, our own farm publication, reaches several hundred thousand farmers every two months.

**Prospect File**—The handy special prospect file is supplied at the actual cost of manufacture. Designed especially for agents, it meets their requirements fully.

**Agents' Stationery**—High grade letterheads, envelopes, billheads and statements are supplied to agents at the actual cost of printing.

**Display Devices**—Wherever it is possible to use display devices to make a display or demonstration of a machine more effective, these devices are supplied at the cost to us.

**Farmers' Calendars**—A beautiful colored lithograph, sold to agents on a co-operative plan, and gaining in popularity each year. The agent's name and address is quite prominent, while the Harvester Company's advertising is limited to a small emblem.

**Repair Order Books and Prospect Records**

—Furnished gratis. A new and popular feature, which enables the

agent to book orders for repairs, and also to get a record of the farmer's equipment, its present condition, and the probable time he will order new machines.

**Cream Separator Signs**—Furnished free on condition that the agent place one in a prominent place on every farm where a McCormick-Deering Primrose Cream Separator has been sold.

**Field and Store Demonstrations**—The agent receives posters, copy for newspaper advertising, and other helps for making demonstrations at seasonable times.

**Special Features**—From time to time unexpected problems arise, and the Harvester Company is always prepared to co-operate with the agent in making special drives, or in promoting sales at all times.



ADVERTISING DEPARTMENT  
PURCHASING, GENERAL OFFICE AND SPACE  
BUYING



SECTION OF THE HARVESTER PRESS  
WHERE MCCORMICK-DEERING LITER-  
ATURE IS PRINTED



**P&O**  
**Light Draft Plows**  
**Walking Riding Tractor**

THE P&O line of "Light Draft Plows" is a part of the great McCormick-Deering line. It is a complete line—walking plows that cut from 6½-inch to 16-inch furrows, one, two and three-bottom riding plows, and tractor plows in two, three, four, five, six and eight-bottom sizes. Then there are horse drawn and tractor disk plows. And the P&O tractor Grub Breaker, a single bottom plow that weighs a ton, cuts a furrow 24 inches wide and 12 inches deep, and that will plow anything the tractor can go through.

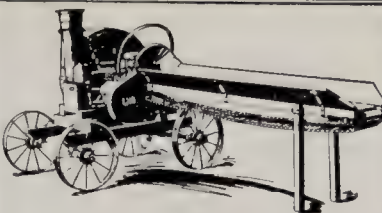
P&O plow builders have been building dependable plows for eighty years—ever since 1842 they have been helping American farmers to solve their plowing problems. On our sample floor we have the P&O plow that will meet your requirements, and you will find it easy to handle, light of draft, simple in construction and sturdy in the extreme.



There's a P&O plow to fit your farm

(Dealer's Name and Address)

**McCORMICK-DEERING LINE**



**Mechanically Correct**

NO MACHINE can give efficient, low-cost service and continue to do so year after year unless it is mechanically correct. Consider the following points of mechanical correctness that distinguish McCormick-DEERING (International) ENSILAGE CUTTERS:

Heavy boiler plate flywheel that is safe at any working speed but has the weight and momentum that require only low speed.

Positive self feed. Corn chute and extra paddle rolls take the place of man at feed table on the three large sizes. Labor saver.

Tool-steel cutter bar, reversible and may be reground.

Curved inward shear knife insures light draft, cuts fodder into even lengths, and shells the least corn off the cob.

Safety lever convenient and may be operated from both sides of machine.


All parts for changing lengths of cuts are always on the machine.

These are only a few of the points of mechanical correctness that are responsible for the operating excellence of McCormick-DEERING ENSILAGE CUTTERS. Made in 5 sizes, capacities, 3 to 25 tons an hour. Power required about 1 h. p. per ton per hour. We will show you these machines and tell you all about them if you will drop into the store next time you are in town.

(Dealer's Name and Address)

**McCORMICK-DEERING LINE**

**Invest in a McCormick-Deering Sheller**



WHEN you buy a corn sheller it's usually a pretty good idea to have an eye to the future, as it were, and take into consideration the matter of possible repairs. For instance, in looking over some of the shellers on the market you will find that the picker wheel and its drive pinion are cast right onto the shaft. This is done because it is a lot easier to manufacture—the whole thing is cast at once instead of in three different operations. There is no assembling to be done, as that's taken care of in making the one-unit casting. The machine is made cheap and will bring trouble along with it.


When it comes to repairing that sheller—if a tooth breaks in the picker wheel you have to buy an entire new casting—shaft, picker wheel and drive pinion—instead of just replacing the individual broken part.

Every part of a McCormick-Deering Corn Sheller is a separate individual casting. The picker wheel, stripper wheel, gears and pinions are keyed to the shaft instead of being cast on. If a tooth breaks in any one of the wheels or gears, you replace only that particular part and not half the machine.

This is only one of the superior features that you will find on McCormick-Deering Shellers. Let us acquaint you with the others the next time you are in town. McCormick-Deering Corn Shellers are made in 5 styles and 7 sizes—1-hole hand shellers, wood and steel; two larger 2-hole shellers, the XL and Keynote for stock farms and feed stores; 2 and 4-hole power shellers; and two sizes of cylinder shellers.

(Dealer's Name and Address)

**McCORMICK-DEERING LINE**



**An International Engine**  
**Puts Profit in Custom Work**

DID you ever stop to consider that if you had an International Kerosene Engine and a feed grinder—and maybe a Meadows stone burr flour mill—you could make a nice profit for yourself doing custom grinding and milling for a few of your neighbors?

There are many farmers who are doing just that very thing. During most seasons there are enough bad weather days when field work is impossible to take care of a profitable amount of custom grinding and flour business. And grinding feed, meal and flour for your own needs pays a big profit. It is a well established fact that a feed grinder saves from 12 to 25 per cent of the grain fed. As practically four-fifths of the corn raised is fed on the farm, the saving made by grinding the feeds pays for the engine and outfit in a short time.

We can fix you up with an entire outfit—International Kerosene Engine, International Feed Grinder, Meadows Burr Mill and any farm machine you may need from the famous McCormick-Deering line. Come in and see us.

(Dealer's Name and Address)

**McCORMICK-DEERING LINE**

## Make Them Think of You

The most effective method for making customers think of your store is by using your local newspaper. Most farmers read the newspaper published at their trading center. By running your advertisements regularly you can keep your business before them throughout the year. Farmers are too busy to make any special effort themselves to remember any particular business—the business must take care of itself by making them remember it.

Years ago advertising was not so essential in the retail field. Travel was difficult and slow. Nearly every farmer did his buying at the nearest town. Conditions are vastly different today. Good roads and the automobile have brought distant trade centers closer than the nearest one was before.

The implement agent who will not keep his business before his trade, who refuses to advertise, who does not keep his store attractive, treat customers courteously, and render adequate service, will find the business going to the agent who does these things, whether that agent is located in the same town, or in a nearby trade center.

By advertising you can keep your trade informed regarding your full line. Advertise each machine in its proper season.

If customers frequently come to your store asking "Do you sell—?" you can rest assured they do not know as much about your business as they should. It is a safe bet that the cash registers of competitors are ringing up sales you should at least have a chance at getting. The most convincing proof of the value of advertising to the retailer is the fact that 80 per cent of the commercial failures today are among non-advertisers.



YOUR LOCAL PAPER COVERS YOUR TERRITORY

Electrotypes of any McCormick-Deering machine will be supplied free of charge. If you write your own copy, order through the branch house the electros you may need to illustrate it.

If you prefer copy written by us from the standpoint of the agent we will send the illustration and ad in one plate, together with proofs. Electros of machines only can be supplied in one, two or larger column width. Electros of complete ads will be supplied in either one or two columns as desired. If you have larger space to fill tell us and we will supply illustrations only; the newspaper will reset the ad to fit your space.

Write your branch house today for copies of our agents' ads on the machines you sell.



NEWS





## Agent's Literature Rack

This new rack is built especially for McCormick-Deering agents. The construction is of metal throughout, highly enameled. Pockets are provided for ten regular catalogs and ten small pocket folders.

The rack is 25 inches wide, stands 16 $\frac{1}{4}$  inches high. Supports are provided at the back to hold it upright when displayed on the counter. The supports can be removed and the rack hung on the wall if desired. In either case, it serves as an attractive store fixture, giving generous display to the advertising matter it contains.

The value of a catalog is greatly impaired if it becomes soiled or crumpled. Then, too, a catalog has no value until it gets into the hands of a prospect or possible prospect. A farmer seldom visits an implement store for the sole purpose of getting a catalog, but if a nice assortment of literature is displayed in this rack where he cannot help seeing it, frequently

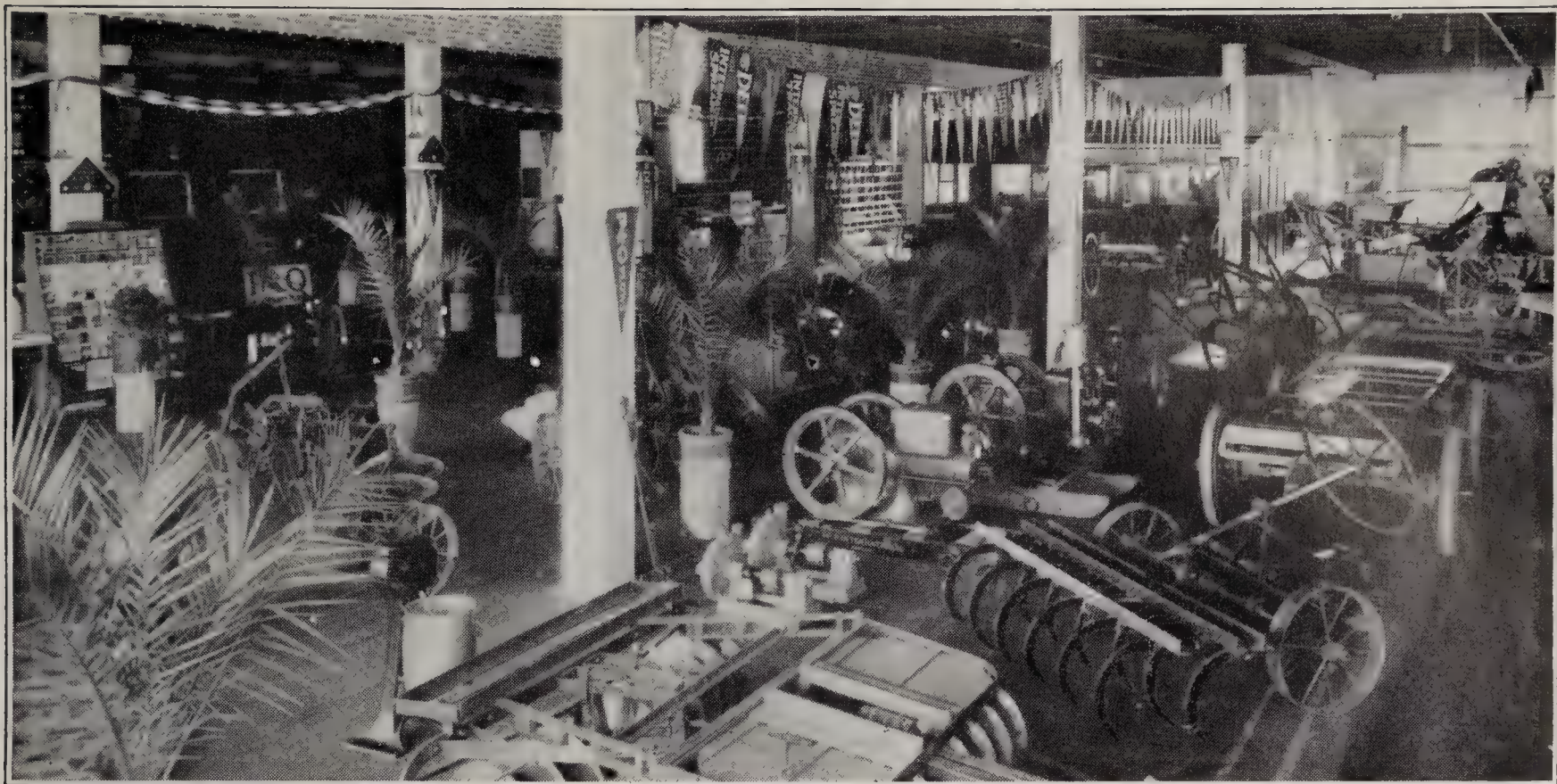
he will put a circular in his pocket, take it home and read it. Every time he does this, it makes some future sale easier for you and harder for your competitors. Often it is the means of creating new prospects. If the customer is already a prospect, it brings him nearer the buying point without any cost to the agent in time or effort.



Customers place the same value on advertising literature as the agent. If it is effectively displayed and kept clean, the customer will have a higher regard for it than he would if it was scattered about the counter or store and allowed to become dirty and torn.

This new rack is supplied McCormick-Deering agents at the actual cost to manufacture in large quantities. The rack will be filled with seasonable literature, securely packed in a carton, and shipped to you by express. Place your orders through the branch house. Order it now.





## Your Display Room

Through advertising and other forces, thousands of farmers are brought daily to the implement stores over the country. Some come to see the new machines; others come to post up on new improvements before replacing an older model. Whether they come through curiosity to see the new, or with the intention of buying, they should be given an opportunity to see the machine itself—not a catalog illustration of it. The catalog has an important place in modern merchandising, but it cannot be substituted for the machine itself.

Farmers visit their implement agent scores of times during the year with no intention whatever of looking over sample machines. But if samples are attractively displayed they will frequently be examined. Up-to-date models will have features of merit not found on older models. New machines will be carefully inspected. Each time they are seen the desire to own becomes stronger.

Seasonable machines can be kept on the floor and changed at proper intervals. Ample space should be left around each machine so that careful inspection can be made without interference. Samples should be well oiled, clean, and in perfect working condition. The more favorable the appearance, the more easily the sale will be made.

The room should be well lighted so the various adjustments of the machines can be clearly seen. It should be heated in the winter months so the prospect may concentrate his mind on the talk of the salesman. This he cannot do if he must stamp his feet and clap his hands to keep his toes and fingers warm. Nor can a salesman effectively present the machine unless he is physically comfortable.

Many implements can be suitably displayed without the use of outside material. However, some machines cannot be effectively demonstrated unless special display devices are used. A line shaft is desirable for demonstrating belt machines and makes an effective demonstration of the engine used for driving it. Riding cultivators can be displayed to best advantage when the prospect can climb on the seat, work the levers, shift the gangs, etc. It is, therefore, advisable to provide a tongue support, gang casters, and perhaps wheel pivots.



DISPLAY FIXTURE FOR THE P & O PLOW BOTTOM. SIMILAR DEVICES CAN BE SUPPLIED FOR OTHER MCCORMICK-DEERING PRODUCTS. SEE YOUR BLOCKMAN OR WRITE THE BRANCH HOUSE FOR FULL INFORMATION.

Have a sample room. Keep it filled with seasonable machines. Use display devices wherever possible. Your customers will soon regard it as the place to go to see the best and most up-to-date machines the market affords. Added business will result.





## Sell the Full McCormick-Deering Line

### A Brief Summary of Its Advantages

While there are many factors that contribute to the success or failure of an implement agent, none is more important than the line of machines handled.

Here and there a man possessing the elements of success in an unusual degree has been able to develop a profitable business in goods of less than standard merit. However, it cannot be denied that a more careful selection of the merchandise would have resulted in far greater success.

There are distinct advantages in being identified in a community as the agent who sells the complete McCormick-Deering line. The name McCormick, Deering, International or P & O on a farm machine speaks volumes to farmers the world over. It is a full and satisfactory answer to scores of questions they might ask—questions they would ask regarding machines they know nothing about.

Long ago farmers learned that there is far more to lasting, dependable farm machines than simply iron and wood and paint; that real value depends on things they cannot see—things that do not show on the surface. Experience has taught them that “after-sale” service varies—that although there is but one best kind of service, no two are alike. It is for these reasons the reputation of the maker weighs so heavily with the farmer in his selection of farm machines. It is for these same

reasons “goods well bought are half sold.”

The agent who handles McCormick-Deering machines finds that the reputation of the machines automatically brings business to his store. The fact that he represents the oldest, the best known, and the most progressive of all implement concerns, gives him a prestige that could not be achieved in any other way. The McCormick-Deering line inspires confidence in his customers because they know they always will be able to get repair parts and service for machines they buy from him. They know that a concern with the resources, magnitude and good will of the International Harvester Company, so necessary and so useful to humanity and civilization, will never “orphan” its products.

The farmer may not know that the International Harvester Company maintains the largest experimental department in the implement manufacturing industry; he may not know that all through the year McCormick-Deering engineers follow their machines in the field in an effort to improve them; he may not know how vast is the investment in branch house stocks of machines and repairs, but he does know that McCormick-Deering products give satisfactory service and that repair parts are quickly available. He knows that when he buys a new McCormick-Deering



machine he can expect a definite value for the price paid—a value he has learned to associate with the McCormick-Deering trademark.

The McCormick-Deering line is complete and adapted to every locality. It means much to an agent to know that his whole line is of the same standard of quality. The McCormick-Deering reputation which has been in process of building for eighty-nine years is shared equally by every McCormick-Deering product, a reputation that goes a long way in making a sale.

The full McCormick-Deering line, aside from its "easy to sell" quality has other advantages every implement agent will appreciate. Selling the full McCormick-Deering line means a lower cost of doing business.

Selling the full McCormick-Deering line puts the routine part of your business on an almost automatic basis. You have only one business system to keep track of, the handling of orders, invoices, discounts, and shipments is easily kept in order. Bookkeeping becomes a simple matter. The extra correspondence and misunderstandings incident to handling mixed lines is eliminated.

Selling the full McCormick-Deering line greatly simplifies the handling of repairs. It is necessary to become familiar with only one method of numbering, one system of pricing, and one system of discounts and terms. Incidentally, the profits from handling the exclusive line of repairs for McCormick-Deering machines is no small item in the annual net profits of McCormick-Deering agents.

Every McCormick-Deering agent has the distinct advantage of doing business with a branch house organization thoroughly familiar with local conditions. The territory covered by Harvester travelers is

very limited, giving them an opportunity to obtain an intimate knowledge of trade possibilities and offer many helpful suggestions to their agents. Through this localization of interest McCormick-Deering agents soon learn that it is a part of the Harvester policy to be just as much interested in the final sale to the farmer and the satisfactory operation of machines in the field as it is in the initial sale to the agent.

A sale of one of our machines means something more to us than the delivery of a machine by the agent. Every McCormick-Deering machine is designed, built and sold to do certain work. It is essential to us that the machine prove satisfactory to the buyer, because it is only then that we retain his confidence and can hope for his future business.

The agent who handles a mixed line will always find it extremely difficult to render a repair and expert service which matches that given by the McCormick-Deering full line agent. Compare McCormick-Deering service with that given by limited line concerns whose nearest office is a thousand or more miles away.

On foregoing pages is given a brief outline of the advertising assistance available to McCormick-Deering agents, which constantly builds new business for McCormick-Deering agents. Farm operating equipment men are familiar with the part played by the Harvester Company in the development of power farming, the inauguration of tractor schools, and similar movements, which has always marked

it as the leader in the farm operating equipment industry.

Summing it all up, the agent's individual, undivided effort on the full McCormick-Deering line pays. Our undivided effort on one agent pays.

## The McCormick- Deering Line

is favorably known everywhere. It pays you good profits, gives satisfaction to your customers, and requires the least effort and expense on your part to sell. It is

The Line  
of  
Least Resistance





# McCormick-Deering Line

## Grain Harvesting Machines

Binders  
Power Drive Binders  
Push-Binders  
Harvester-Threshers  
Headers  
Reapers  
Threshers

## Haying Machines

Mowers  
Rakes  
Tedders  
Side Rakes and Tedders  
Loaders  
Sweep Rakes  
Stackers  
Baling Presses  
Bunchers

## Corn Machines

Planters  
Listers  
Drills  
Cultivators  
Lister Cultivators  
Binders  
Ensilage Cutters  
Pickers  
Huskers and Shredders  
Shellers

## Tillage Implements

Tractor Plows  
Riding Plows  
Walking Plows  
Plow Packers  
Field Cultivators  
Rod Weeders  
Disk Harrows  
Tractor Harrows  
Orchard Harrows  
Spring-Tooth Harrows  
Peg-Tooth Harrows  
Scufflers, One-horse  
Soil Pulverizers  
Land Packers  
Land Rollers

## Planting and Seeding Machines

Corn Planters  
Corn Drills  
Listers  
Grain and Grass Drills  
Broadcast Seeders  
Lime Sowers

## Power Machines

Kerosene Engines  
Kerosene Tractors  
Motor Trucks

## Beet Tools

Seeders  
Cultivators  
Pullers

## Belt Machines

Ensilage Cutters  
Huskers and Shredders  
Corn Shellers  
Vessot Grinders  
Threshers  
Hay Presses

## Dairy Equipment

Cream Separators, hand  
Cream Separators, belted  
Cream Separators, electric  
Kerosene Engines  
Motor Trucks

## Other Farm Equipment

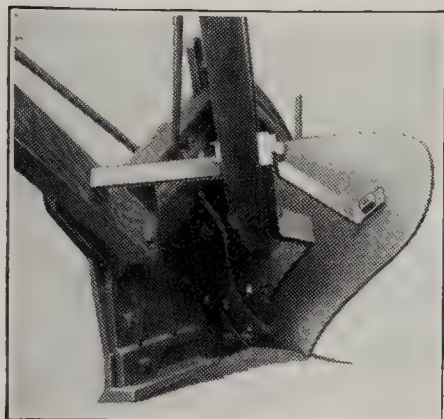
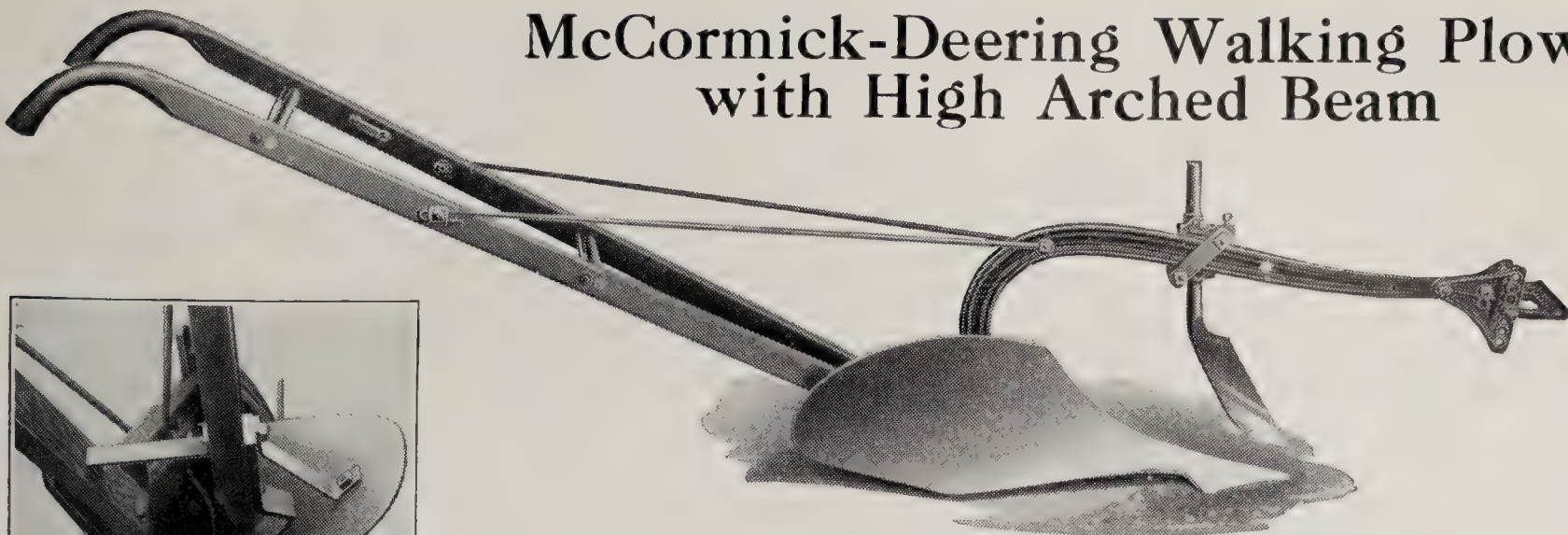
Farm Wagons and Trucks  
Farm Sleighs  
Logging Sleighs  
Manure Spreaders  
Potato Diggers  
Knife Grinders  
Tractor Hitches  
Binder Twine  
Repairs

For complete index see last pages in this catalog.



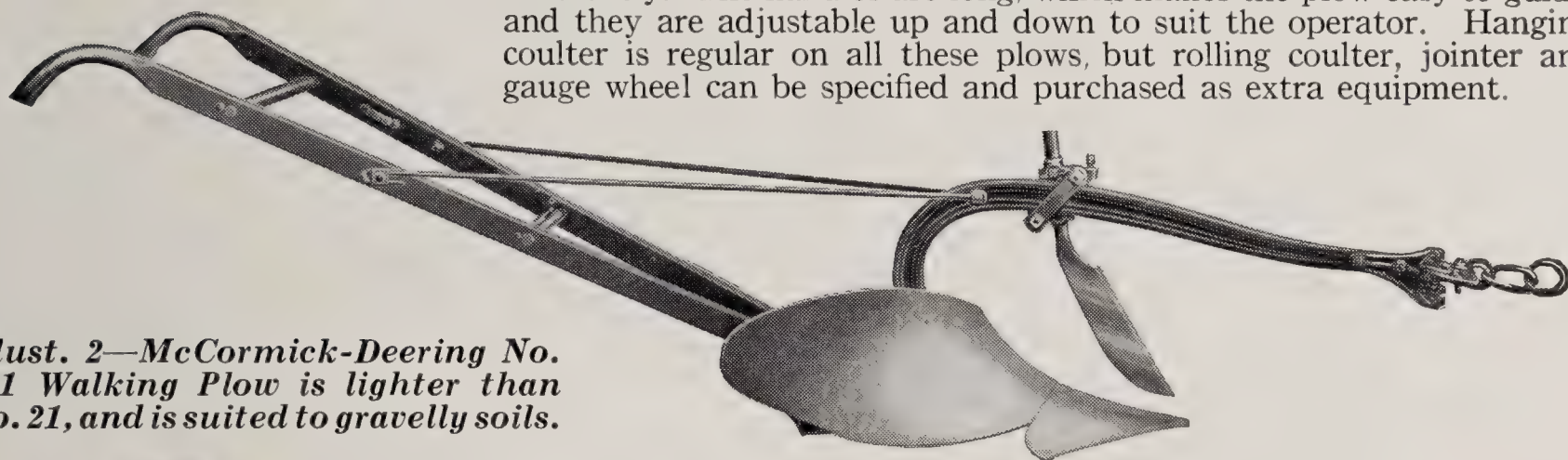


## McCormick-Deering Walking Plows with High Arched Beam

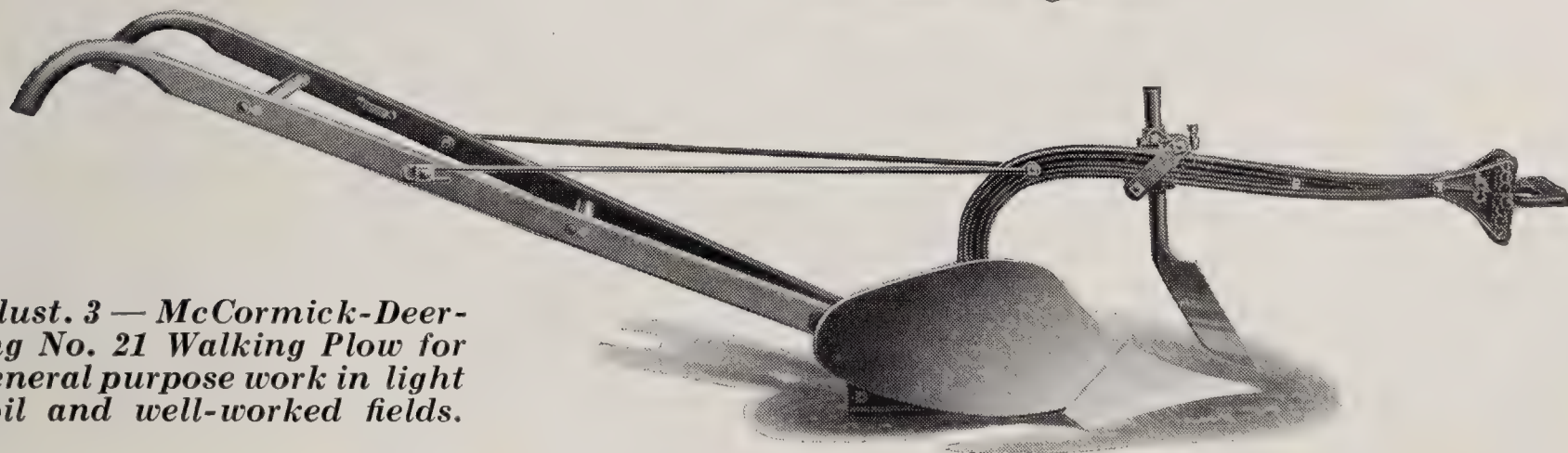


*Illust. 1—McCormick-Deering No. 315 Walking Plow is made especially for extra heavy and sticky clay soil.*

The outstanding feature on the three plows listed on this page is the design of the beam. Not only is it made strong and heavy and long enough to insure steady running, but it has a high arch at the rear. This construction permits the easy passage of trash, weeds, manure, corn stalks, etc., that might have a tendency to clog in a plow built differently. The handles are long, which makes the plow easy to guide, and they are adjustable up and down to suit the operator. Hanging coulter is regular on all these plows, but rolling coulter, jointer and gauge wheel can be specified and purchased as extra equipment.



*Illust. 2—McCormick-Deering No. 101 Walking Plow is lighter than No. 21, and is suited to gravelly soils.*



*Illust. 3 — McCormick-Deering No. 21 Walking Plow for general purpose work in light soil and well-worked fields.*

### Specifications—McCormick-Deering Arched Beam Walking Plows

Plow	Bottoms & Shares Used			Regular Equipment	Extra Equipment	Approx. Weights
	Regular Share	Extra Shares				
		Chilled	Steel			
No. 21	No. 21-9''	8'', 9'', 10'' plain 8'', 9'' deep suck 8'', 9'' cutter 8'', 9'' cutter deep suck	9'', 10'' plain	1 extra chilled share  Hanging Coulter Long Wood Handles	Extra shares as listed  Rolling Coulters Gauge wheel & jointer Short wood handles	152 lbs.
No. 101	No. 101-8''	8'', 10'' plain 8'', 10'', 12'' deep suck 8'', 10'' cutter deep suck	8'', 10'' plain 8'', 9'', 10'' deep suck	Same as above	Same as above	138 lbs.
No. 315	No. 315-6''	6'', 7'', 8'', 9'' plain 7'', 8'' cutter 7'', 8'' deep suck	7'' plain 7'', 8'' deep suck	Same as above	Same as above	150 lbs.





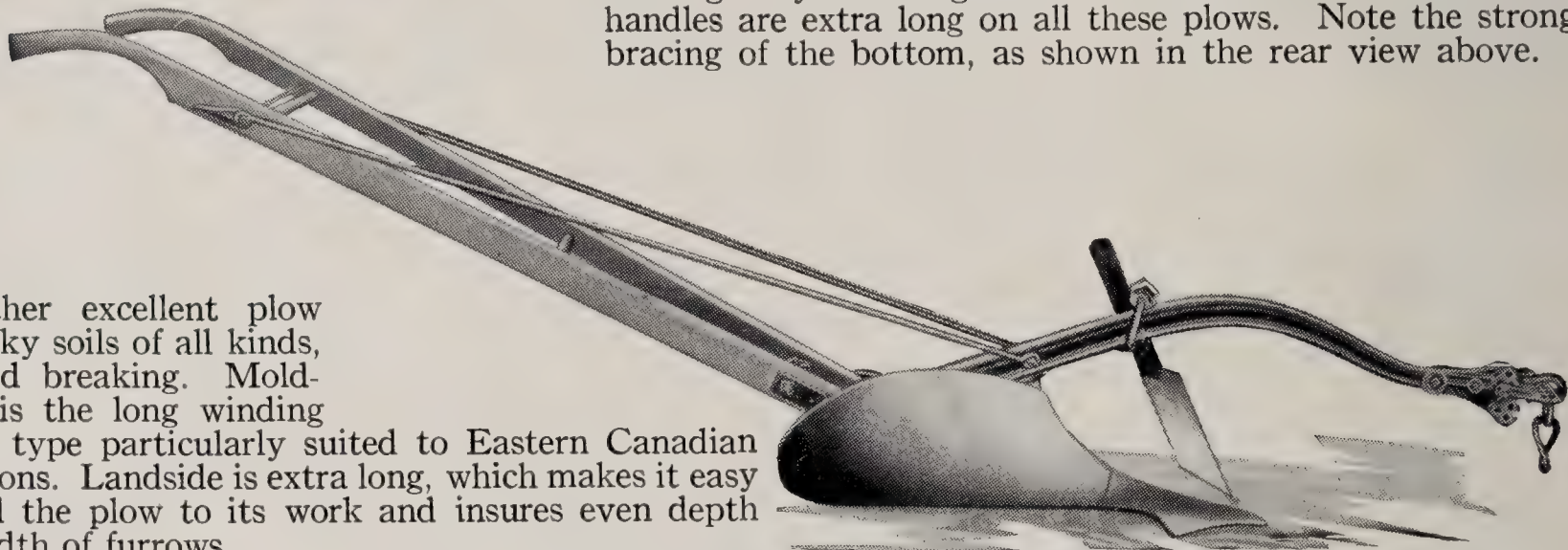
## McCormick-Deering Walking Plows



*Illust. 4—McCormick-Deering No. 415 Walking Plow.*

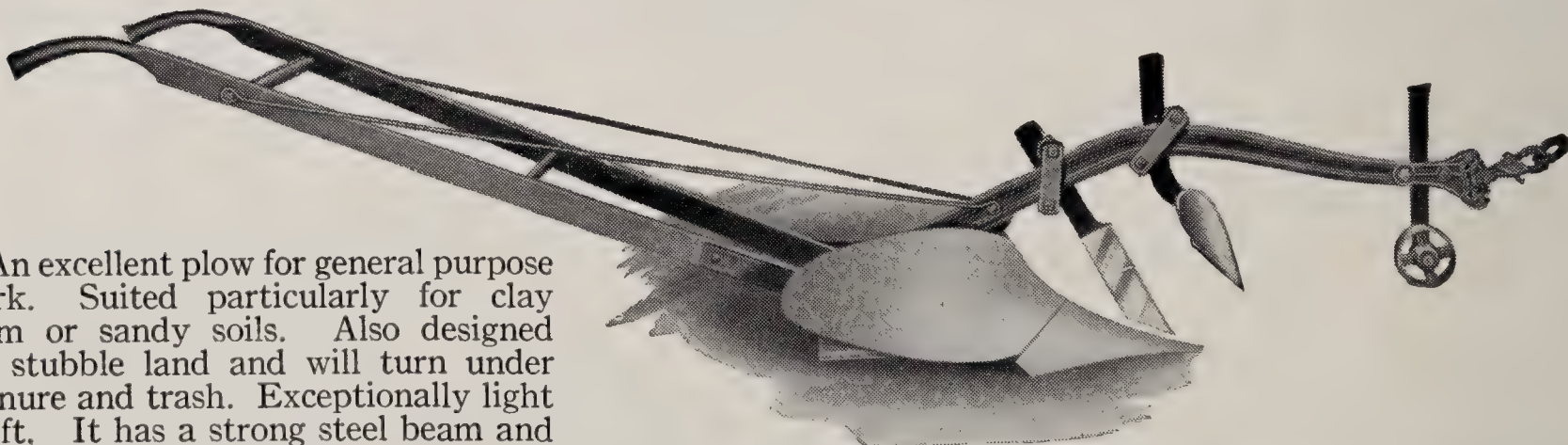
A small capacity plow which runs steadily and cuts a clean, uniform furrow in heavy clay soils or sod. Long, curved moldboard gives just the right slant to the furrow slice. Beam and handles are extra long on all these plows. Note the strong bracing of the bottom, as shown in the rear view above.

Another excellent plow for sticky soils of all kinds, and sod breaking. Moldboard is the long winding Scotch type particularly suited to Eastern Canadian conditions. Landside is extra long, which makes it easy to hold the plow to its work and insures even depth and width of furrows.



*Illust. 5—McCormick-Deering No. 308 Walking Plow.*

An excellent plow for general purpose work. Suited particularly for clay loam or sandy soils. Also designed for stubble land and will turn under manure and trash. Exceptionally light draft. It has a strong steel beam and extra long handles.



*Illust. 6—McCormick-Deering No. 121 Walking Plow.  
Jointer and Gauge Wheel are Priced Extra*

### Specifications—McCormick-Deering Walking Plows

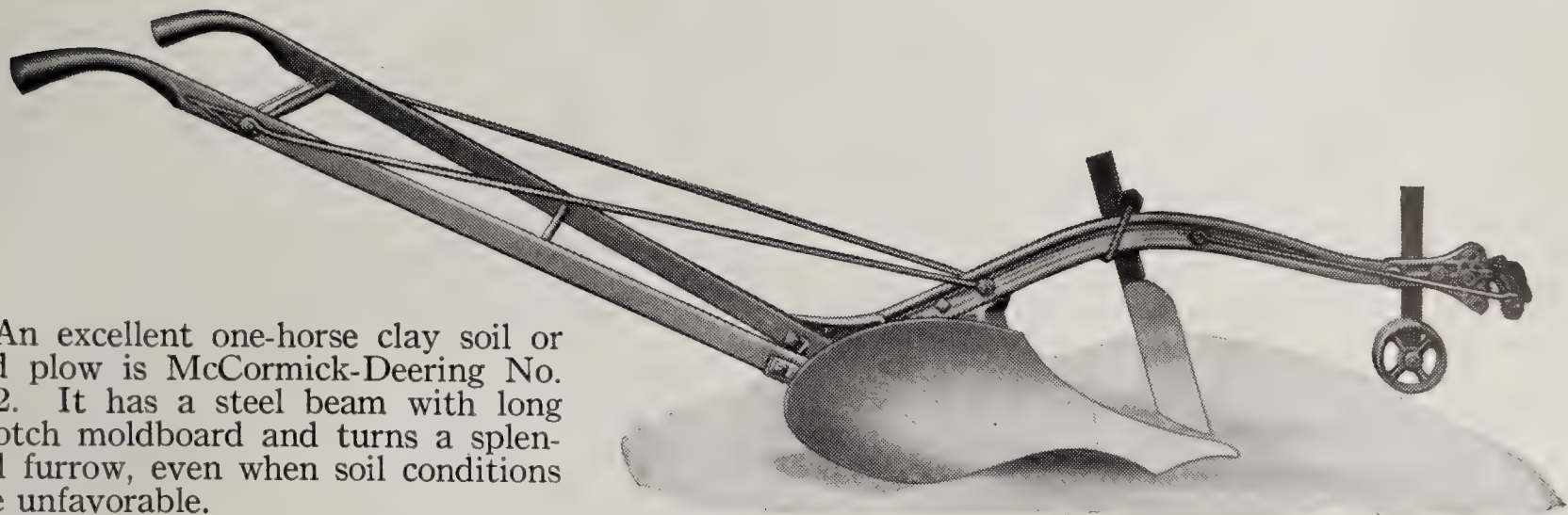
Plow	Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
	Regular Share	Extra Shares				
	Chilled	Chilled	Steel			
No. 415	No. 315-6"	6", 7", 8", 9" plain 7", 8" cutter 7", 8" deep suck	7" plain 7", 8" deep suck	1 extra chilled share Hanging Coulter Long wood handles	Extra shares as listed Rolling Coulters Gauge Wheel Jointer Short wood handles	145 lbs.
No. 308	No. 208-6"	No. 205-6", 7", 8" plain, deep suck cutter deep suck	None	Same as above	Same as above except no short handles.	145 lbs.
No. 121	No. 121-9"	8", 9", 10" plain 8", 9" deep suck cutter and cutter deep suck	9", 10" plain	Same as above	Same as No. 415	150 lbs.





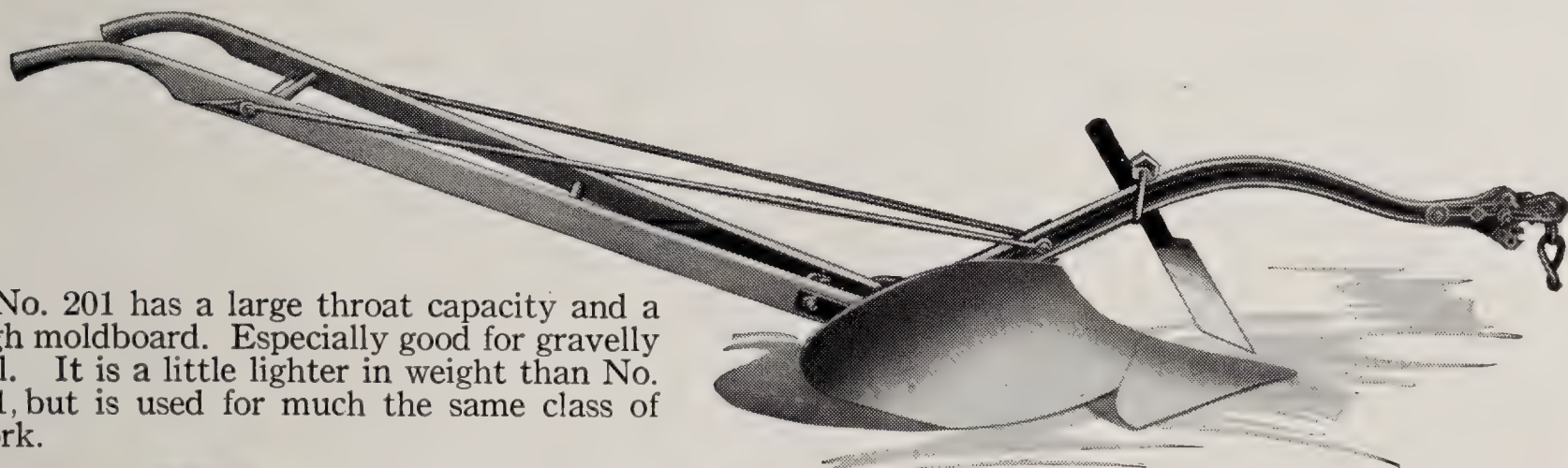
## McCormick-Deering Walking Plows

An excellent one-horse clay soil or sod plow is McCormick-Deering No. 232. It has a steel beam with long Scotch moldboard and turns a splendid furrow, even when soil conditions are unfavorable.



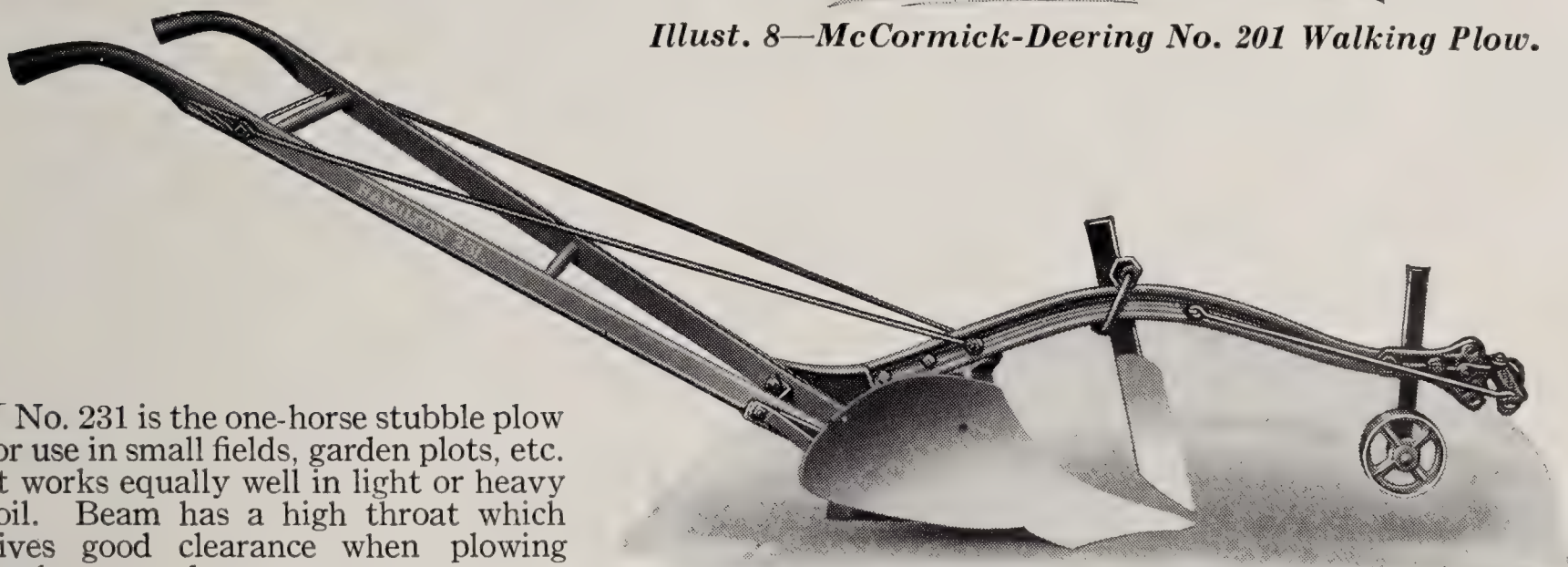
*Illust. 7—McCormick-Deering No. 232 Walking Plow.*

No. 201 has a large throat capacity and a high moldboard. Especially good for gravelly soil. It is a little lighter in weight than No. 121, but is used for much the same class of work.



*Illust. 8—McCormick-Deering No. 201 Walking Plow.*

No. 231 is the one-horse stubble plow for use in small fields, garden plots, etc. It works equally well in light or heavy soil. Beam has a high throat which gives good clearance when plowing trashy ground.



*Illust. 9—McCormick-Deering No. 231 Walking Plow.*

### Specifications—McCormick-Deering Walking Plows

Plow	Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
	Regular Share	Extra Shares				
	Chilled	Chilled	Steel			
No. 232	No. 232-6"	6", 7", 8" plain 8" cutter	6", 7", 8" plain	1 extra chilled share Hanging Coulter	Extra shares as listed Rolling Coulter Gauge Wheel Jointer	113 lbs.
No. 201	No. 201-8"	8", 10" plain 8", 10", 12" deep suck 8", 10" cutter deep suck	8", 10" plain 8", 9", 10" deep suck	1 extra chilled share Hanging Coulter Long wood handles	Extra shares as listed Rolling Coulters Gauge Wheel Jointer Short wood handles	143 lbs.
No. 231	No. 231-7"	7", 8", 9" plain 7" cutter	None	Same as 232	Same as No. 232	116 lbs.





## Chattanooga Hillside Plow



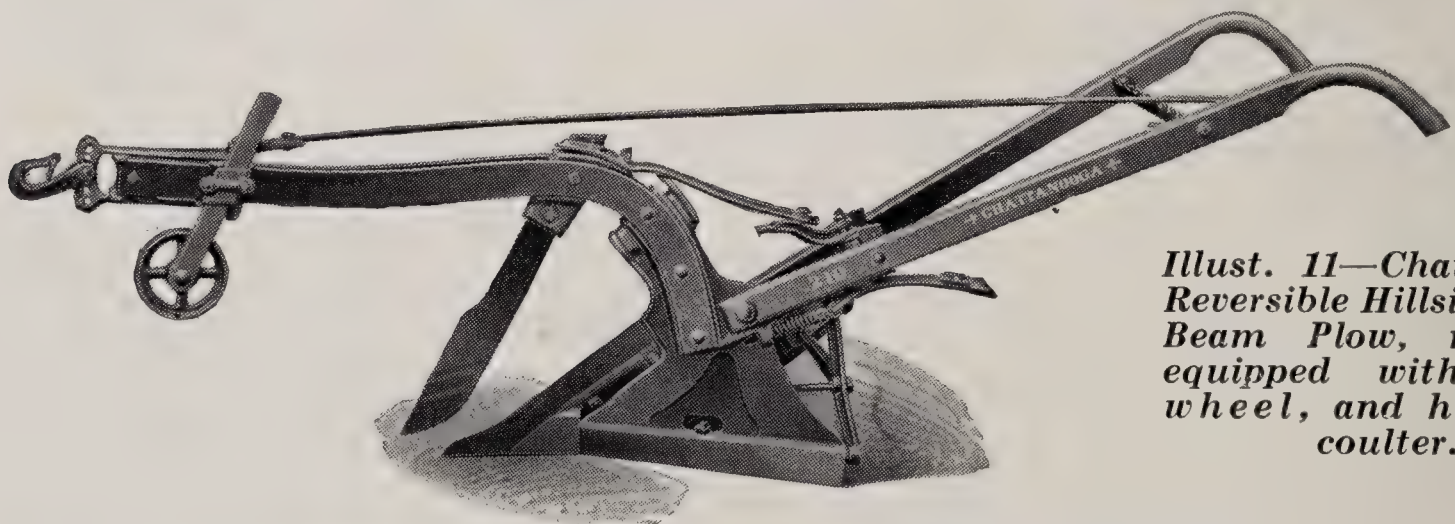
*Illust. 10—Chattanooga Hillside Plow equipped with reversible jointer which is supplied only on special order at extra cost.*

The Chattanooga plow has a reversible bottom which makes it possible, in hillside plowing, to begin at the bottom of the slope and work back and forth on the same side of the plowed land, throwing all the furrows down the hill. It is easy to reverse the bottom. On reaching the end of the furrow the operator merely tips the plow on its side, unlatches the bottom by means of the foot latch and swings the bottom over to the other side. By the time the team is turned the bottom is in position for the return furrow. This kind of plowing leaves no dead fur-

rows, and therefore prevents the formation of ditches or washes.

The Chattanooga Hillside plow is equipped with a lever for shifting the clevis from back of the plow. Also with a shifting jointer supplied on special order. These features speed up the plowing, and are mighty handy.

The beam is made of two flat steel bars, trussed together in such a way as to form a beam that is both light and strong. The beam and handles are long, giving good leverage, both while plowing and when reversing the bottom.



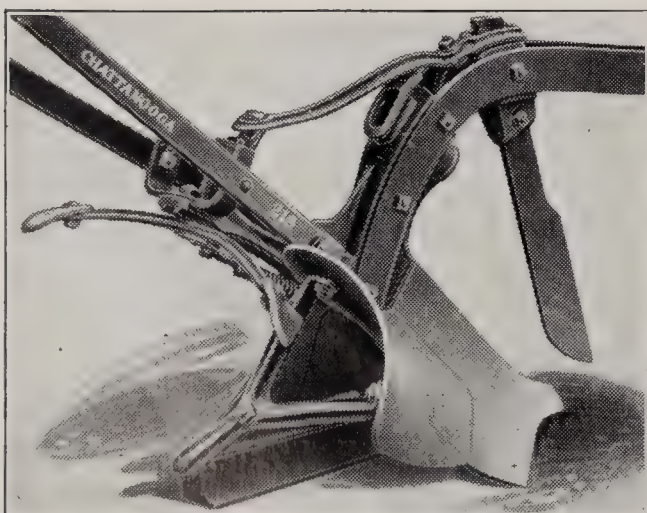
*Illust. 11—Chattanooga Reversible Hillside Truss Beam Plow, regularly equipped with gauge wheel, and hanging coulter.*

### Regular Equipment

Hanging coulter is attached to the beam. The point runs down to the level of the share point, and cuts a clean bank when plowing ground that has a sod surface or which abounds in roots, as the coulter, going through the sod or roots, enables the operator to plow straight and uniform furrows. The coulter is automatic and reverses when the plow is reversed. Gauge wheel is adjustable up or down and regulates the depth of plowing.

### Specifications—Chattanooga Hillside Plow

No.	Description	Capacity		Approx. Weight
		Depth	Width	
210	2-horse	7"	14"	132 lbs.

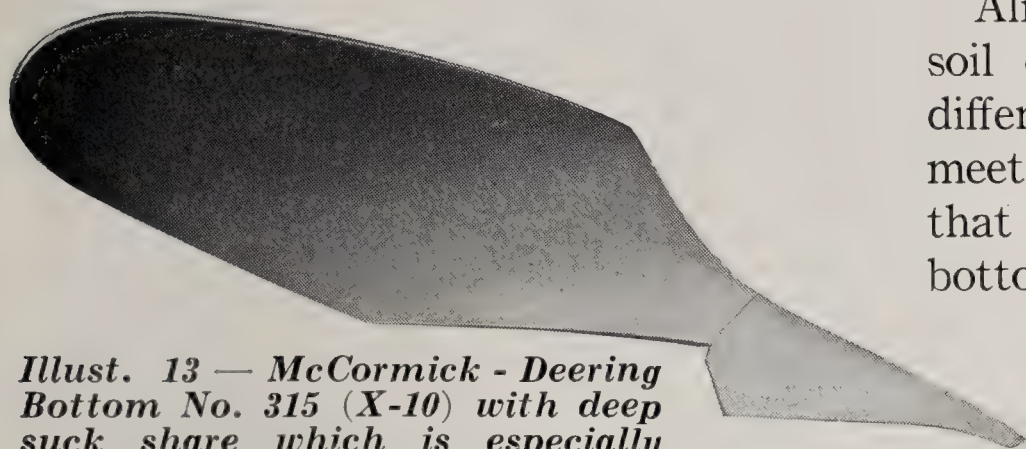


*Illust. 12—Partial rear view, showing the reversing feature. The hanging coulter is regular equipment.*





## Look Well to the Bottom of the Plow



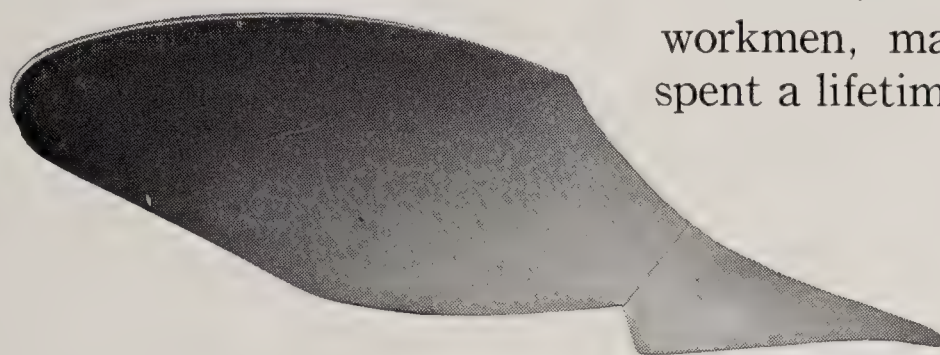
*Illust. 13 — McCormick - Deering Bottom No. 315 (X-10) with deep suck share which is especially suited for heavy clay soil.*

Plow shares have always offered the imitator a very profitable field because, being made of steel and iron, the "Made for" share conceals its defects of fit and workmanship until you actually put it on the plow and work with it; then it is usually too late to do anything but accept it.

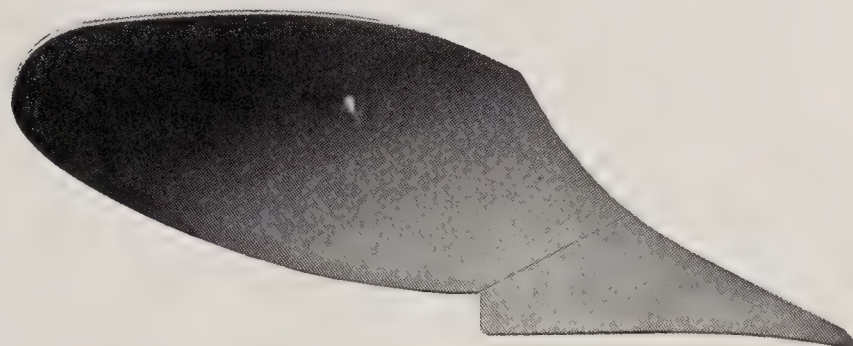
To safeguard our Canadian friends who own McCormick-Deering plows, in the purchase of their extra shares and to help them get nothing but the genuine, we stamp the number and description of each share right into the metal on the back side, where it cannot be erased or changed. If every man who has occasion to buy shares for any McCormick-Deering plow will seek the nearest agent and when the extra share is handed to him look for

Almost every farm presents different soil conditions. Different farmers have different ideas about plowing. It is to meet these widely varied requirements that the line of McCormick-Deering plow bottoms has been developed. Regardless of your soil conditions, there is a McCormick - Deering plow that will suit you.

The immense factory where McCormick-Deering plows are built is a part of the largest agricultural implement works in the British Empire. Here skilled workmen, many of whom have spent a lifetime at building plows, turn out plow bottoms that are especially designed for Canadian conditions.



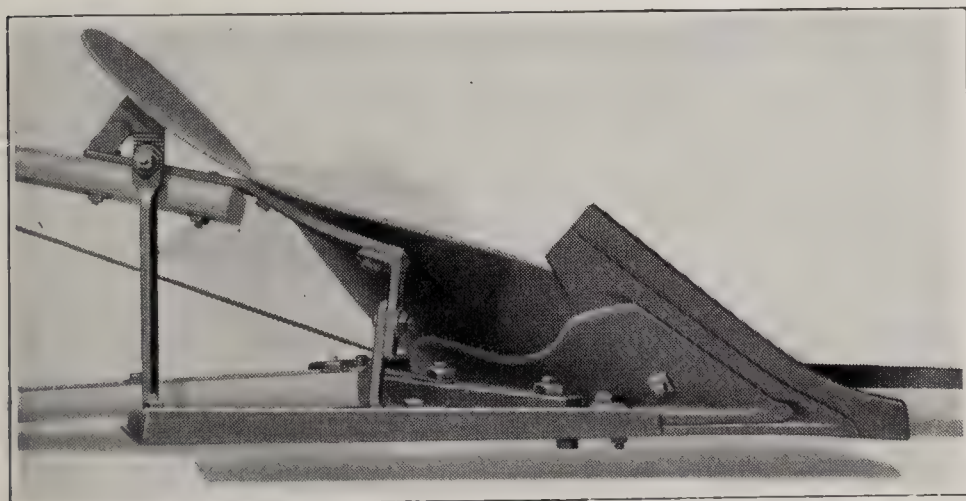
*Illust. 14—McCormick-Deering Bottom No. 201 (V-10) with deep suck share for general-purpose work in gravelly soil.*



*Illust. 15—McCormick-Deering Bottom No. 221 (W-10) with deep suck share for general-purpose work in stubble land.*

our mark on the back side, he will protect himself against loss of time and temper. If the share is merely stenciled with the words "Will fit" or "Made for" **HAND IT BACK.** Do not take it, for it is not the genuine and will neither fit nor wear so well as the genuine.

You can get genuine shares for McCormick-Deering plows if you will insist upon it, and they are well worth all they cost.

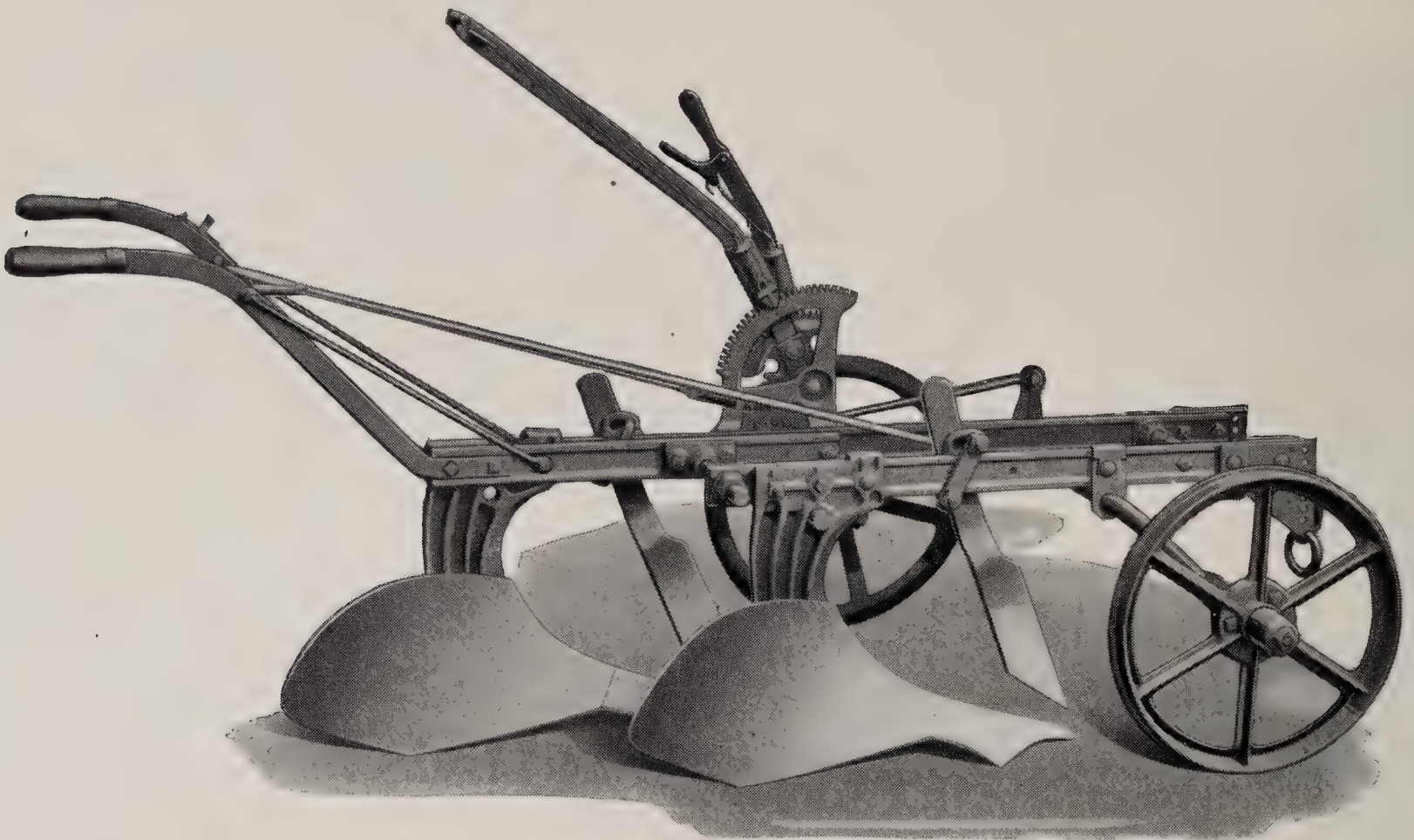


*Illust. 16—Underside of No. W-10 bottom, showing two adjustable braces supporting the moldboard.*





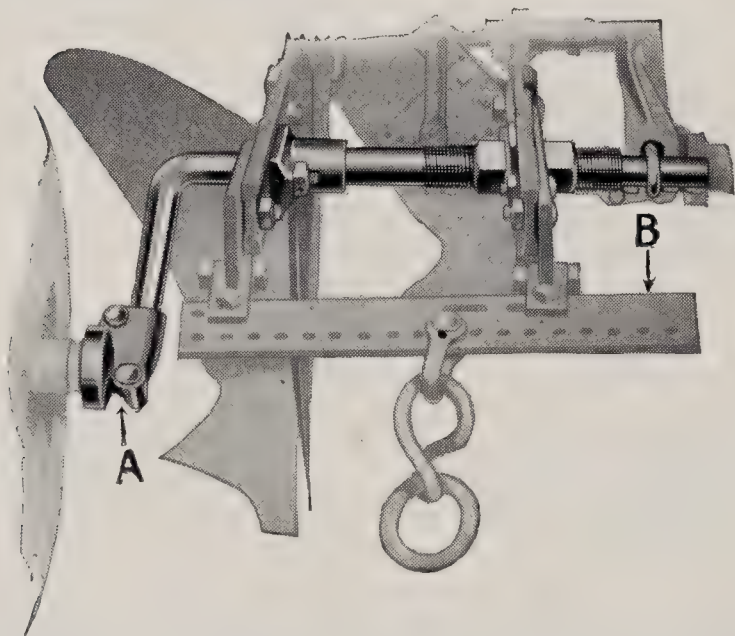
## McCormick-Deering No. 136 Walking Plow



*Illust. 17—McCormick-Deering No. 136 Walking Gang Plow.*

### Easily Adjustable

McCormick-Deering No. 136 is a light walking gang designed to do good work under any general plowing conditions. It is light in draft and adapted nicely to the requirements of the man with a limited number of draft animals.



*Illust. 18—Double-nutted bolt changes width of cut. Dust-tight housing, A, on furrow wheel axle. B, indicates steel cross clevis with wide range of hitch adjustment.*

### Strong Main Frame

The main frame beams are of heavy forged steel, and two adjustable steel brace bolts form a rigid rectangular frame to resist all field strains. The standards attaching the bottoms to the beams are extra heavy with ribs and webs to make them strong and rigid.

Height of furrow wheel and land wheel can be changed instantly by two levers. Wheels have flanges to hold plow to its work. They are fitted with grease-retaining, dust-proof bearings. The furrow wheel axle can be shifted sidewise to keep the furrows straight and uniform. The levers are where they can be easily reached, and both hands can be used when necessary.

When changing from a large to a small bottom, or vice versa, the width of the frame can be adjusted to suit by means of two spacing bolts at front and rear.

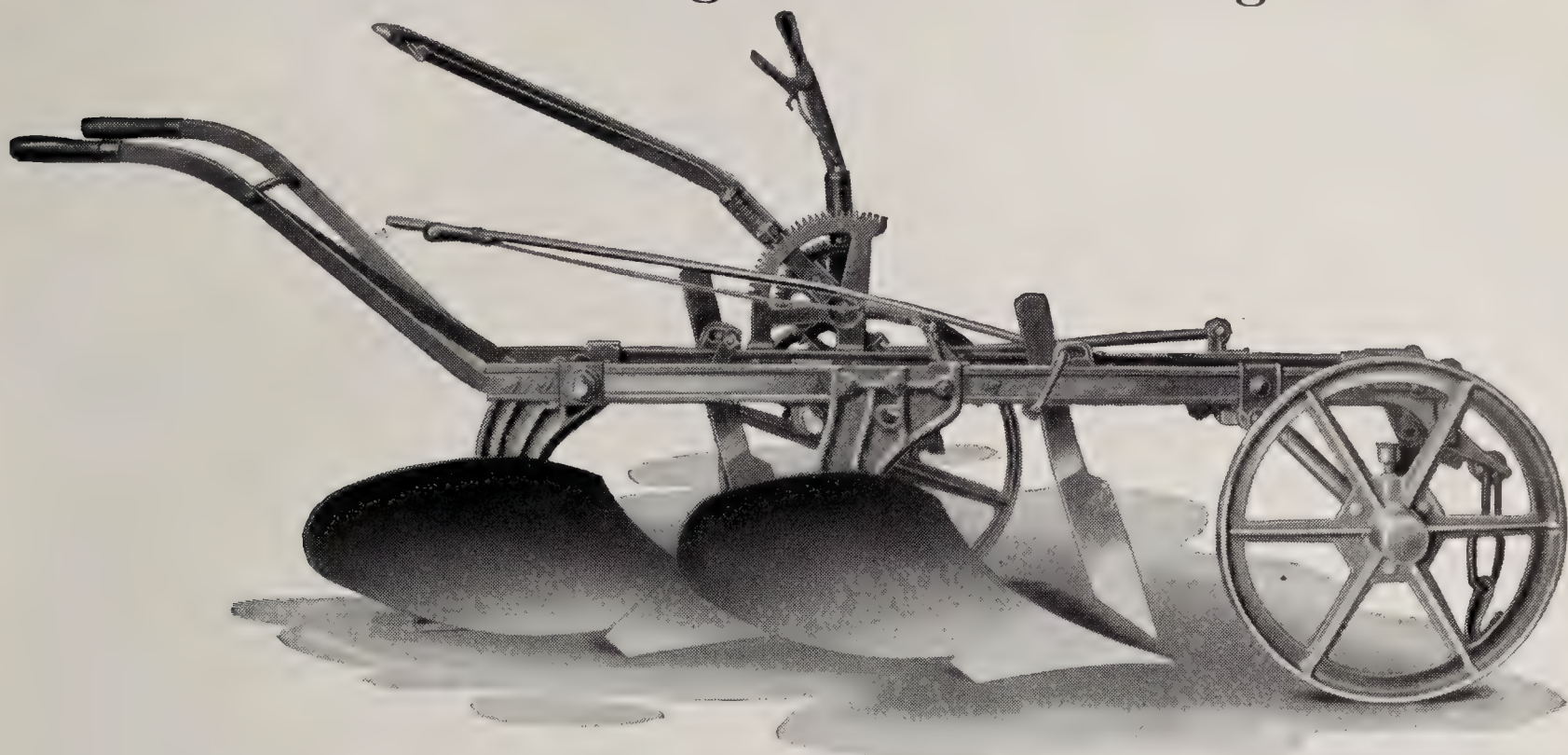
### Specifications—McCormick-Deering No. 136 Walking Gang Plow

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Share	Extra Shares				
Chilled	Chilled	Steel			
No. 232, 6'' For sod or clay soil	No. 232, 6'', 7'', 8'' K 8'' No. 231, 7'', 8'', 9'' K 7''	No. 232, 6'', 7'', 8''	2 Extra Chilled Shares Hanging Coulters Rear Handles	Extra Shares as listed Rolling Coulters Jointers 2-Horse Eveners 3-Horse Eveners	345 lbs.





## McCormick-Deering No. 141 Walking Plow



*Illust. 19—McCormick-Deering No. 141 Walking Gang Plow.*

### Heavier and Stronger

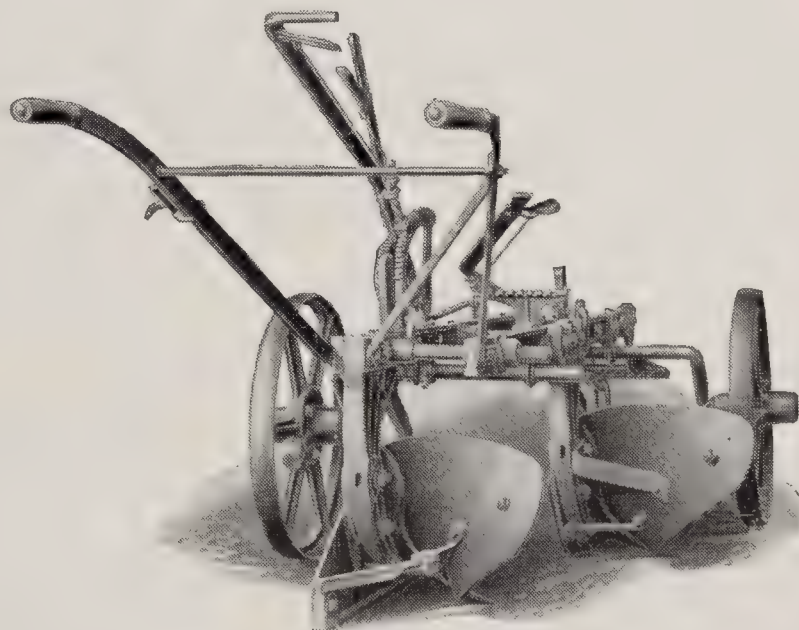
No. 141 is similar in many respects to No. 136. It is, however, somewhat heavier and stronger and is intended to do a rougher class of work than No. 136. It has all the valuable and convenient adjustment features which have made No. 136 gang so popular in the eastern provinces of Canada. The beams on No. 141 are larger and heavier than on No. 136, although both beams are made the same length. The bottom standards on No. 141 are unusually strong and heavy and are constructed with several ribs to insure great strength and lasting qualities under rough and unusual conditions. While No. 141 gang is regularly equipped with IHC 121-A bottoms, the standards are so constructed that IHC 201-A bottoms can be used if the work requires. Extra bottoms are supplied only on special order and at additional cost.

### Adjustable Beams

The two heavy, forged steel, full-length beams are held at exactly the proper distance apart by means of three adjustable cold-rolled steel bolts, each of which is held in its proper position by two large lock nuts. As on No. 136 gang, the distance between the beams can be changed to vary the width of the

cut, as desired. The landside is fitted with a removable shoe which can be replaced at slight cost when worn and thus avoid the expense of buying an entirely new landside.

The hitch on No. 141 has the same wide range of adjustment that you find on No. 136. The pull comes directly on the beams without side draft.



*Illust. 20—Rear view showing extremely strong construction of bottoms and frame bracing.*

### Specifications—McCormick-Deering No. 141 Walking Gang Plow

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Share	Extra Shares				
Chilled	Chilled	Steel			
IHC 121, D.S. 9"	IHC 121-8", 9", 10" D.S. 8", 9" K 8", 9" KDS 8", 9" IHC 201-8", 10" D.S. 8", 10", 12" KDS 8", 10"	IHC 121-9" and 10"    IHC 201-8" and 10" D.S. 8", 9" and 10"	2 extra chilled shares Hanging Coulters Rear Handles	Extra shares as listed Rolling Coulters Jointers 2-Horse Eveners 3-Horse Eveners 4-Horse Eveners Combined Rolling Coulters and Jointers	468 lbs.





## McCormick-Deering No. 13 Sulky Plow

Light Draft  
Easy to Handle



*Illust. 21—McCormick-Deering No. 13 Sulky Plow.*

### Automatic Lift

This is a horse-lift plow. To raise the bottom the plowman merely presses forward slightly on the foot lever, throwing the horse-lift device into action, and the traction of the furrow wheel raises the bottom.

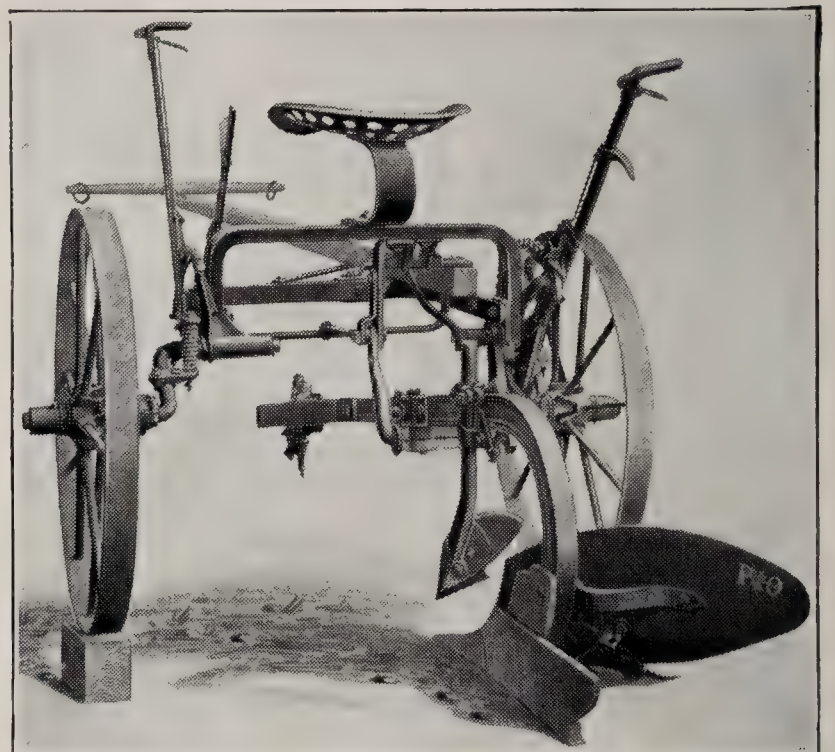
A handy feature is the pole shift lever. It enables the plowman to keep the furrows straight, insuring uniform work.

The clevis has a double series of holes for depth adjustment, and the cross clevis an ample range of adjustment sidewise.

### Operator Can Walk

A hand trip is also provided on the lifting lever. Should the plowman desire to walk, as he often does on a cold day, this hand trip gives him control of the plow from the ground.

The tongue can be set on the side of the frame for three horses or in the center for two or four.



*Illust. 22—Rear view showing ample clearance.*

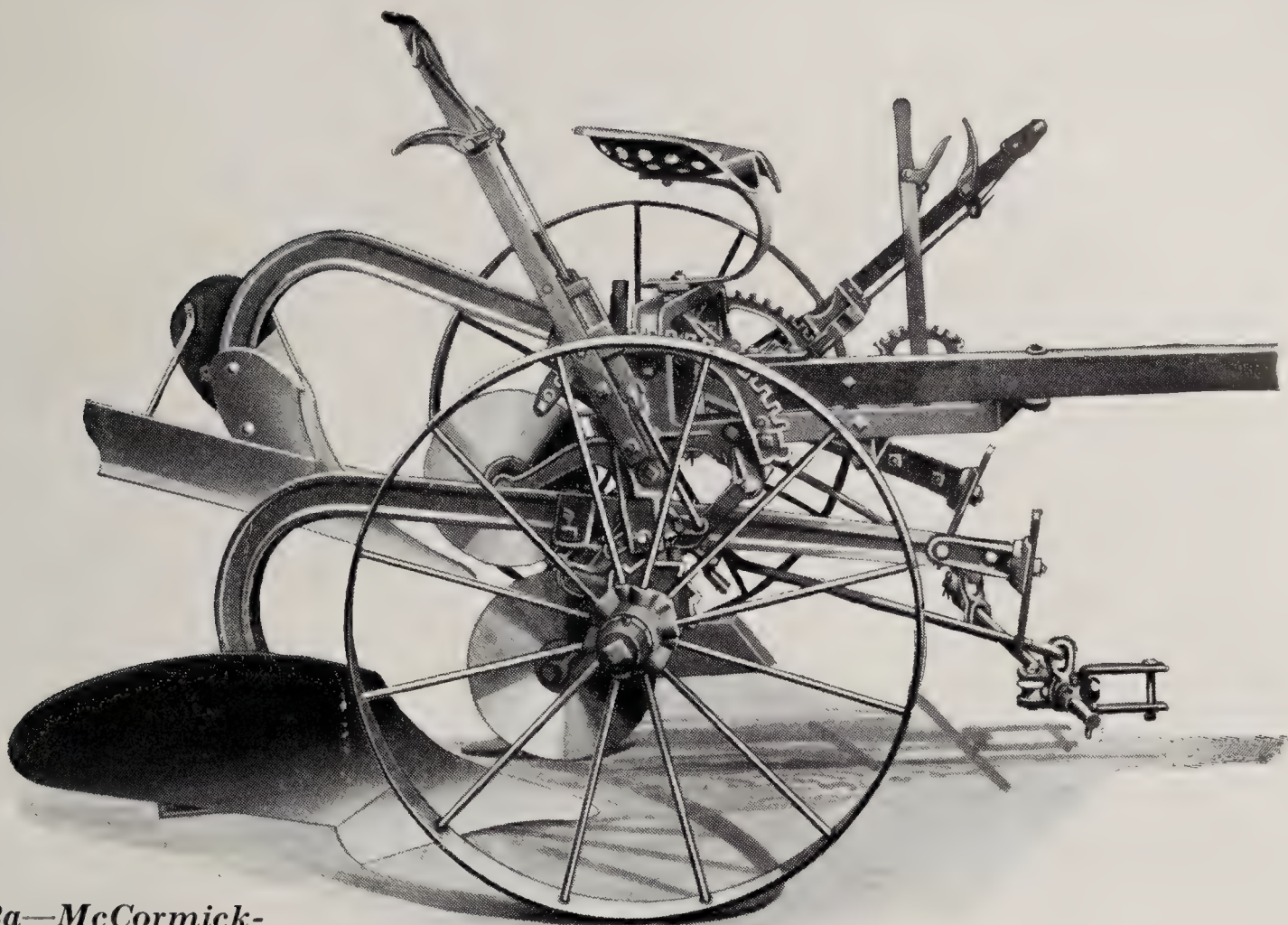
### Specifications—McCormick-Deering No. 13 Sulky Plow

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Shares	Extra Shares				
Chilled	Chilled	Steel			
W-10, DS 8''	W-10, 8'', 9'', 10'' DS 8'', 9'' K 8'', 9'' KDS 8'', 9'' V-10, 8'', 10'' DS 8'', 10'', 12'' KDS 8'', 10'' X-10, 6'', 7'', 8'', 9'' DS 7'', 8'' K 7'', 8''	W-10, 9'', 10''  V-10, 8'', 10'' DS 8'', 9'', 10''  X-10, 7'' DS 7'', 8''	1 extra chilled share, 8'' Weed Hook 2-horse eveners Rolling coulter Draft rod	Extra shares as listed Hanging coulter 3-horse eveners Jointer Combined coulter and jointer	495 lbs.





## McCormick-Deering Two-Way Sulky



*Illust. 22a—McCormick-Deering Two-Way Sulky Plow.*

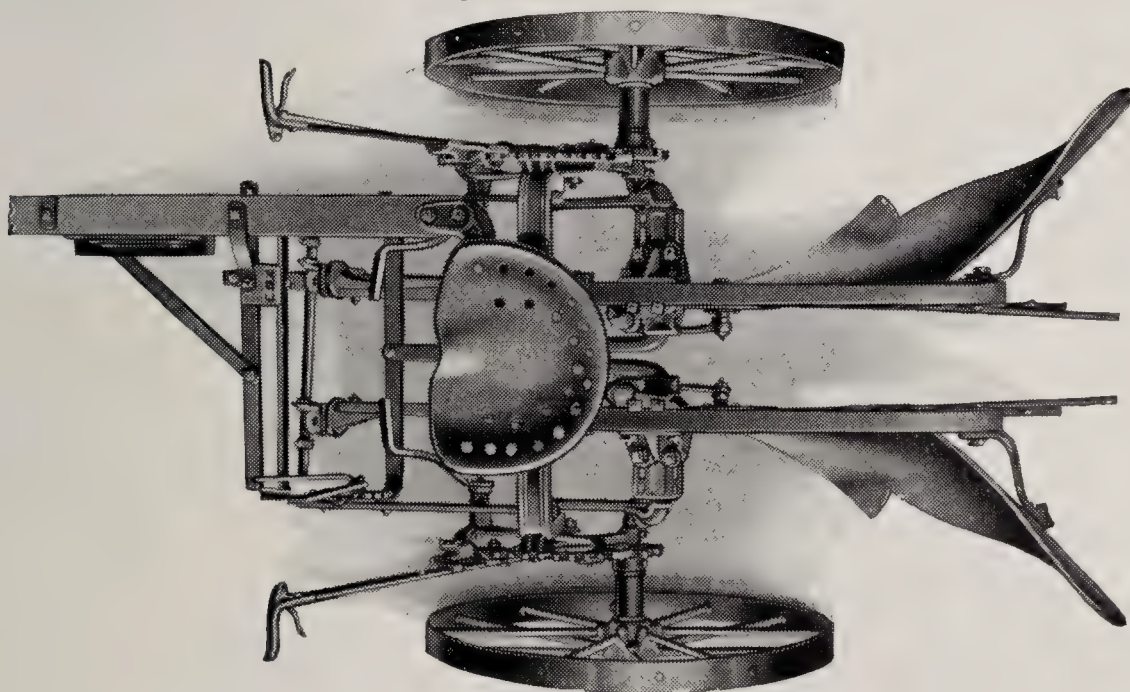
This is a two-way sulky plow. With it the plowman can plow back and forth on the same side of the plowed ground, alternating the left and right-hand bottoms, and never make any dead furrows. On rough ground, irregular fields, or hillsides, this plow makes it possible to do good, even work.

It has a horse-lift device which operates when the driver trips the foot lever. This feature leaves the driver with his hands free to manage the team.

As the bottoms are used alternately, it is necessary for the draft to shift from one beam to the other. This is accomplished through the use of a sliding bar arrangement of the clevis hitch.

The wheels have wide rims with staggered spokes. Ample provision has been made for oiling all bearings without removing the wheels.

The seat may be tilted so that the operator can sit comfortably upright when working on hillsides.



*Illust. 23—Top view of Two-Way Plow.*

### Specifications—McCormick-Deering Two-Way Plow

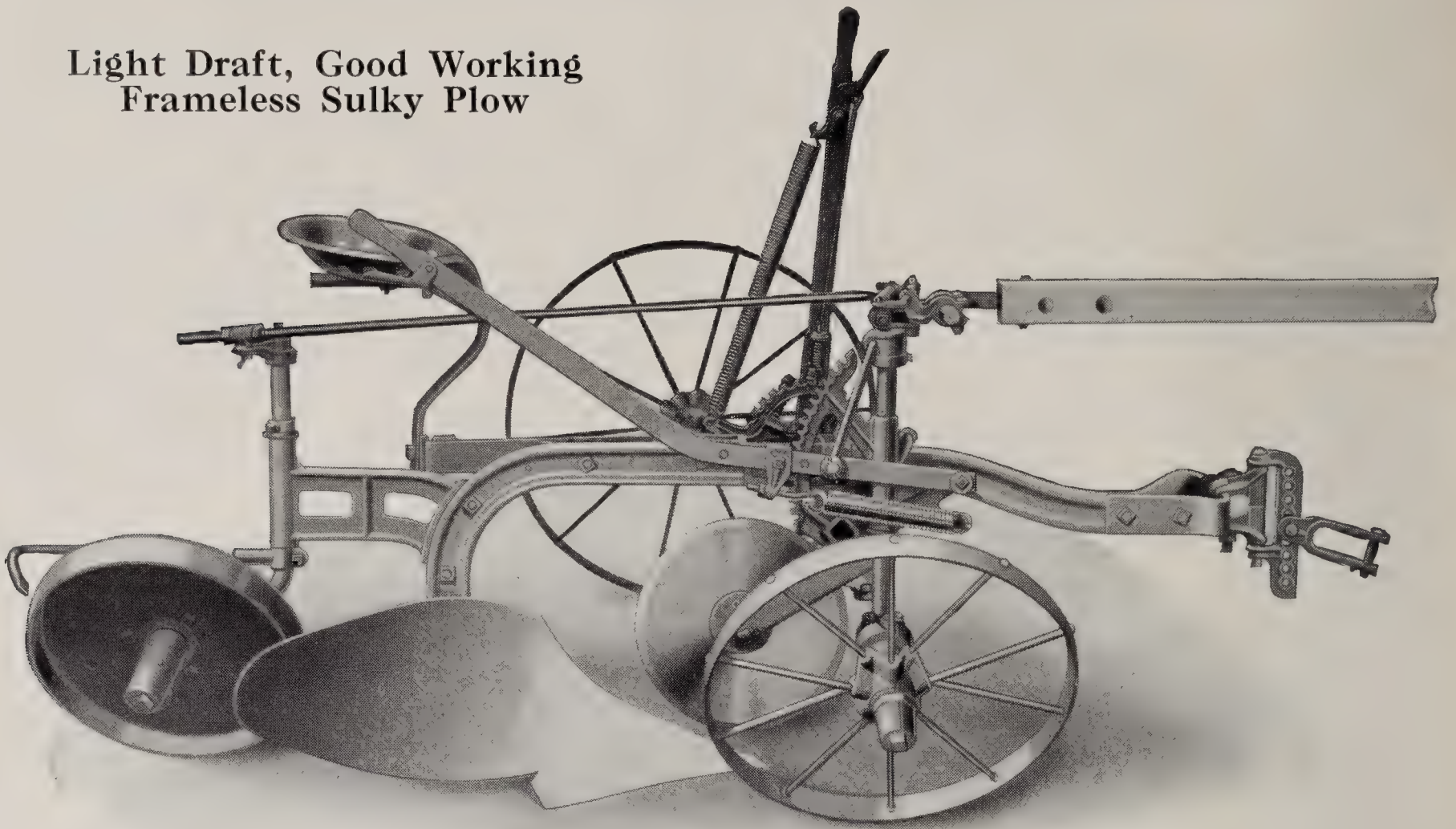
Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Share	Extra Shares				
Chilled	Chilled	Steel			
W-10, DS 8'' RH	MBB9R-12''	Steel shares 12'' can be purchased extra	2 Extra chilled shares 2-horse eveners Rolling coulters	Extra shares as listed 3-horse eveners Hanging coulters Jointers	638 lbs.
W-10, DS 8'' LH	MBB9L-12''				





## McCormick-Deering No. 5 Sulky Plow

Light Draft, Good Working  
Frameless Sulky Plow



*Illust. 24—McCormick-Deering No. 5 Sulky Plow.*

### Simple and Sturdy

This type of McCormick-Deering sulky is a frameless plow and therefore very simple in construction. It is a very easy plow to operate, and has given excellent satisfaction in all parts of Eastern Canada, where it has been used. There are no heavy or awkward parts, but the build of the plow is strong and sturdy to give ample margin of durability under rough or severe conditions.

### Automatic Control

The rear wheel is controlled by means of a controlling rod connecting with an arm on the front furrow axle. The plow is regularly equipped with a pole, and the team controls the action of the front and rear furrow wheels. This feature will appeal to Eastern farmers who are particular about their plowing, because the furrows can be kept straight and crooked furrows can be gradually straightened.

### Strong Wheels

Thirty-inch land wheel; 24-inch furrow wheel and 18-inch rear wheel are strong and durable. Land and furrow wheels are made with staggered spokes cast into the hubs and hot riveted into 2-inch oval-faced tires. Rear wheel is of the solid pan type. All hubs have dust-proof boxings, sand bands and hard-oil screw caps. Rear wheel has an adjustable scraper.

### Cushion Spring Absorbs Shocks

A cushion spring between the land wheel axle and the lever which works in connection with this axle absorbs the vibration caused by the land wheel passing over rough ground, thereby adding considerably to the comfort of the driver. The levers are easy to operate and convenient to the plowman. One lever controls the depth and the other levels the plow at the desired depth.

### Specifications—McCormick-Deering No. 5 Sulky Plow

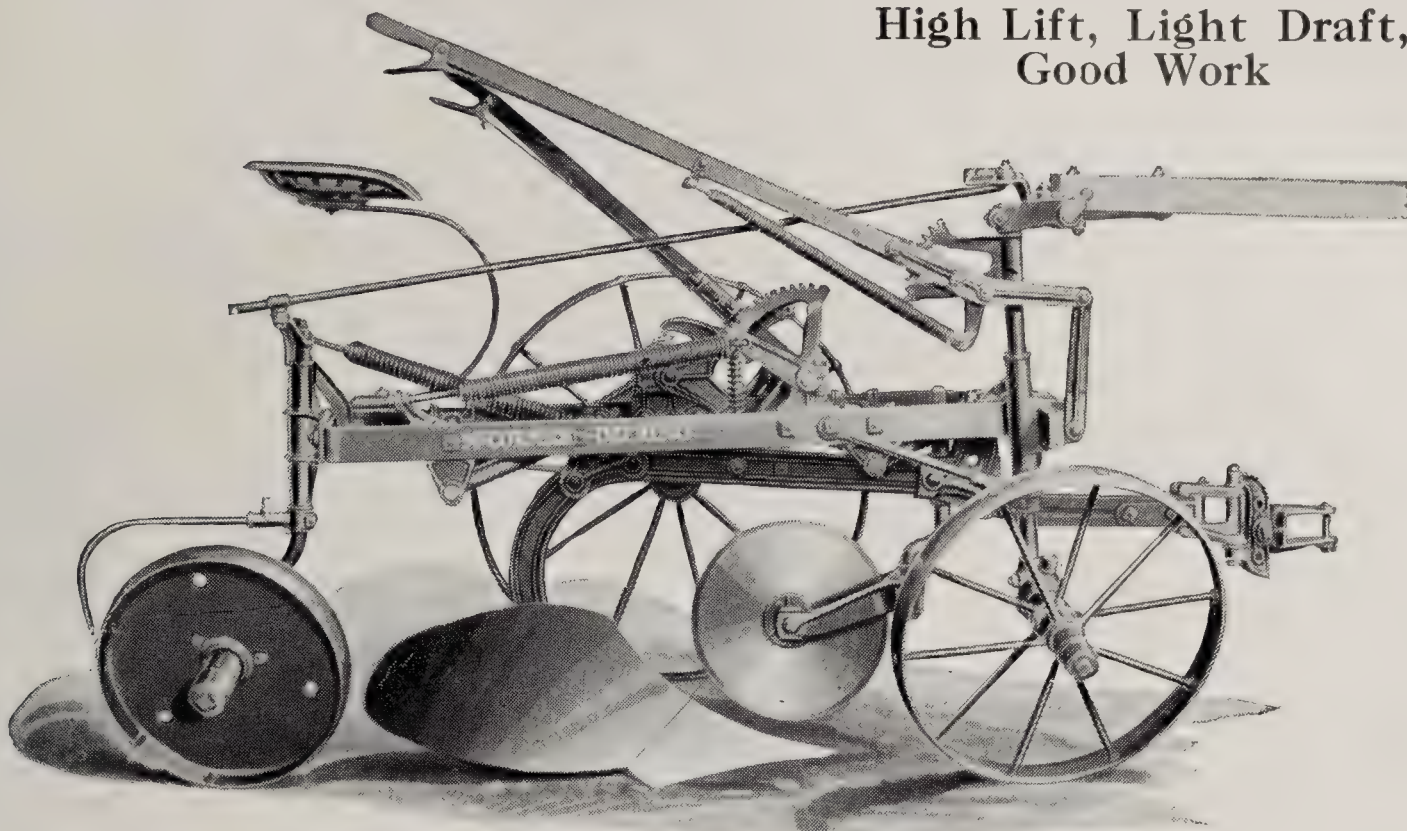
Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Shares	Extra Shares				
Chilled	Chilled	Steel			
W-10, DS 10"	W-10, 8", 9", 10" DS 8", 9" K 8", 9" KDS 8", 9" V-10, 8", 10" DS 8", 10", 12" KDS 8", 10" X-10, 6", 7", 8", 9" DS 7", 8" K 7", 8"	W-10, 9", 10"  V-10, 8", 10" DS 8", 9", 10" X-10, 7" DS 7", 8"	1 extra chilled share Weed hook 2-horse eveners Rolling coulter Front furrow wheel shifting attachment	Extra shares as listed Hanging coulter 3-horse eveners Jointer Combined coulter and jointer	475 lbs.





## McCormick-Deering No. 51 Sulky Plow

High Lift, Light Draft,  
Good Work



*Illust. 25—McCormick-Deering No. 51 Sulky Plow*

### Strong, Convenient and Light Draft

McCormick-Deering No. 51 sulky plow has features of strength, convenience, ease of operation, and light draft that you will find on no other Canadian plow. It has been designed and developed in Canada by Canadian plowmen who thoroughly understand the peculiar conditions to be encountered. In examining this plow and comparing it with others, you will find it more substantially built throughout. This durable construction does not add to the draft—in fact, we are told by users that it pulls lighter than any other similar plow of their acquaintance.

### Strong, Non-twist Main Frame

Particular attention is called to the main frame, which, as you will observe, is made of one piece of bar steel bent into a rectangular shape and accurately bolted together over the front furrow wheel. This main frame, while light in weight provides a solid support for mounting the levers and hanging the bottom. Extra bracing is provided at all points subject to strain or twist. This construction contributes to light draft by holding the wheels and all moving parts in rigid alignment.

### Long Axle Serves as Support

The axle of the land wheel extends from the hub up over the frame, where it is securely fastened to both sides by means of extra long frame bearings. This construction provides a continuous axle which forms a stronger support for the frame than could be secured in any other way. It supplements the strength of the frame and does its part to offset twisting strains incident to rough plowing.

### A Two-Bail Plow

The bottom is carried on two bails. The first bail is longer than the rear, which causes the point of the share to enter the ground first. This permits the plow to assume full plowing depth instantly. Foot lift is provided in conjunction with an auxiliary lifting lever. Strong tension springs assist the driver in raising the bottoms from the ground and relieve him of much heavy lifting.

### A Leader in the East

This high-grade, well-built sulky plow has found widespread favor throughout Eastern Canada. Farmers tell us they can do just as good a job of plowing with No. 51 sulky as they could with a walking plow—and they ride while they work.

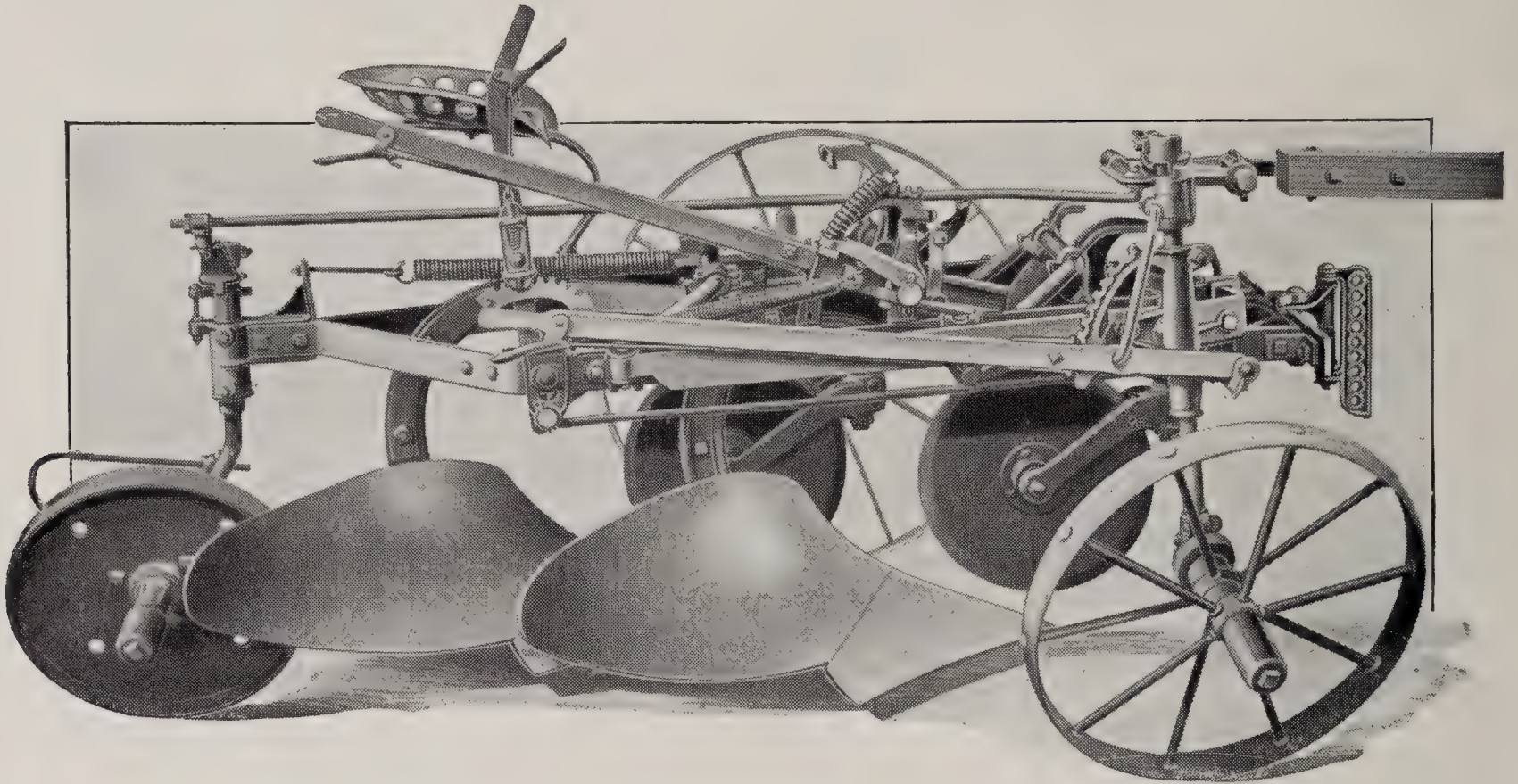
### Specifications—McCormick-Deering No. 51 Sulky Plow

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Share Chilled	Extra Shares				
	Chilled	Steel			
IHC-221 D.S. 10"	IHC 221-D.S. 8", 10" K. D. S. 8", 10" IHC 201A-8", 10" D. S. 8", 10", 12" K. D. S. 8", 10" IHC 315A-6", 7", 8", 9" D. S. 7", 8"	IHC 221-D.S. 8", 10" IHC 201A-8", 10" D. S. 8", 9", 10" IHC 315A-7" D. S. 7", 8"	1 Extra Chilled Share Rolling Coulter 2-Horse Eveners Tongue & Neckyoke	Extra Shares as listed Hanging Coulter Combined coulter and jointer 3-Horse Eveners	630 lbs.





## McCormick-Deering No. 2-C Gang Plow



*Illust. 26—McCormick-Deering No. 2-C High-Lift Gang Plow.*

### A High-Lift Gang

McCormick-Deering 2-C gang is a high-lift, foot-lift riding plow that is light in draft, and that has every feature necessary for first-class plowing.

The foot-lift is extremely easy to operate—a boy can raise the bottom.

A unique device is provided in connection with the foot-lift by which the main lifting spring not only counterbalances the weight of the plow bottom and beam, but also acts on the toggle to hold the bottoms in the ground while plowing. This relieves the driver from the necessity of putting his weight on the foot lever while plowing in rough ground.

A set screw in the trip arm can be adjusted to prevent the foot trip from passing dead center so that when a stone or root is encountered the bottom will rise and avoid damage.

### Strong and Durable

The cushion spring contributes to better work, with smoother furrow bottoms, and lightens the work of the horses. It also prevents most of the jolt or vibration, occasioned by rough ground, from being transmitted to the operator, so that he rides comfortably regardless of the plowing conditions.

The rear-wheel axle can be adjusted in or out by means of two set screws in the axle bracket, and the wheel can be set so as to eliminate excessive friction on the landside of the plow. Up and down adjustment is also provided.

The land-wheel axle extends clear across the plow, being fastened to the frame bars with two long bearings. This construction helps to prevent twisting of the frame in rough plowing. It also helps to keep the land wheel from spreading out at the bottom.

### Specifications—McCormick-Deering No. 2-C Gang Plow

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Share	Extra Shares				
Chilled	Chilled	Steel			
W-10, D.S. 10''	W-10, D.S. 8'', 10'' K.D.S. 8'', 10'' V-10, D.S. 8'', 10'' K.D.S. 8'', 10'' X-10, D.S. 7'', 8''	W-10, D.S. 8'', 10'' V-10, D.S. 8'', 9'', 10'' X-10, D.S. 7'', 8''	2 Extra chilled shares Rolling Coulters 3-Horse Eveners Tongue and Neckyoke	Extra Shares as listed Hanging Coulters Combined Coulters and Jointers 4-Horse Eveners Weed Hooks	771 lbs.





## McCormick-Deering No. 142 Riding Plow



*Illust. 27—McCormick-Deering No. 142 Low-Lift Riding Gang Plow.*

### Simplest Riding Gang

No. 142 gang is as simple in construction and as light in weight as it is possible to build a plow of this type. Two spacing braces at front and rear are threaded and equipped with two lock nuts for changing the width of cut of the bottoms from eight to ten inches. They can be regulated to small fractions of an inch.

The rear wheel and the front furrow wheel are connected with a controlling rod device which permits the rear wheel to caster freely when turning at the ends of the field.

### Easy to Plow Straight

The connection over the front furrow wheel is so designed that in following a reasonably straight course across the field the rear wheel axle remains rigid, making the plow run true regardless of the weaving or irregular walking of the team.

As soon as the team begins to turn at the end of the field, the slotted arm which releases the controlling rod swings around automatically and the rear wheel is permitted to caster naturally.

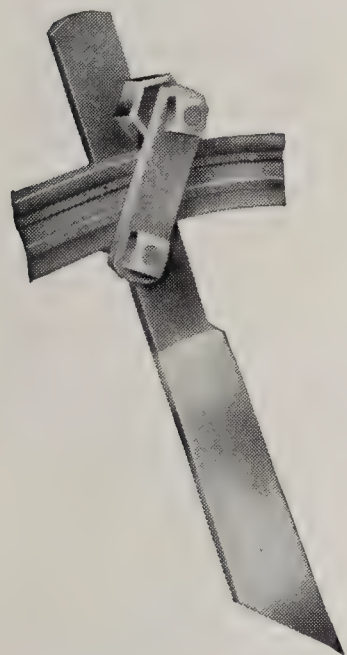
A screw adjustment is provided at the rear end of the control rod for changing the "set" of the rear wheel. This device contributes considerably to the quality of the plowing by helping to keep the furrows straight.

The beams are made of heavy, high quality, I-beam steel, strongly bolted together and well braced.

There is ample clearance under the beams and twenty-one inches clearance between the bottoms (fore and aft), giving good clearance in the trashiest ground.

All wheels are equipped with removable dust-proof boxes, sand bands and hard oil screw caps. Collars, held by linch pins through the axles, take end-wear off the wheel boxes.

Solid pan-type rear wheel prevents the accumulation of trash.



*Illust. 28—Hanging coulters can be supplied on order for No. 142 Plow.*

### Specifications—McCormick-Deering No. 142 Low-Lift Riding Gang Plow.

Bottoms and Shares Used			Regular Equipment	Extra Equipment	Approx. Weight
Regular Shares	Extra Shares				
Chilled	Chilled	Steel			
IHC-221-DS 10"	IHC-201-8", 10" DS-8", 10", 12" KDS-8", 10" IHC-315-6", 7", 8", 9" K-7", 8" DS-7", 8"	IHC-201-8", 10" DS-8", 9", 10" IHC-315-7" DS-7", 8"	2 extra chilled shares Rolling coulters 3-horse eveners Tongue and Neckyoke	Extra shares as listed Hanging coulters Jointers 4-horse eveners 2-horse eveners Combined rolling coulters and jointers	674 lbs.

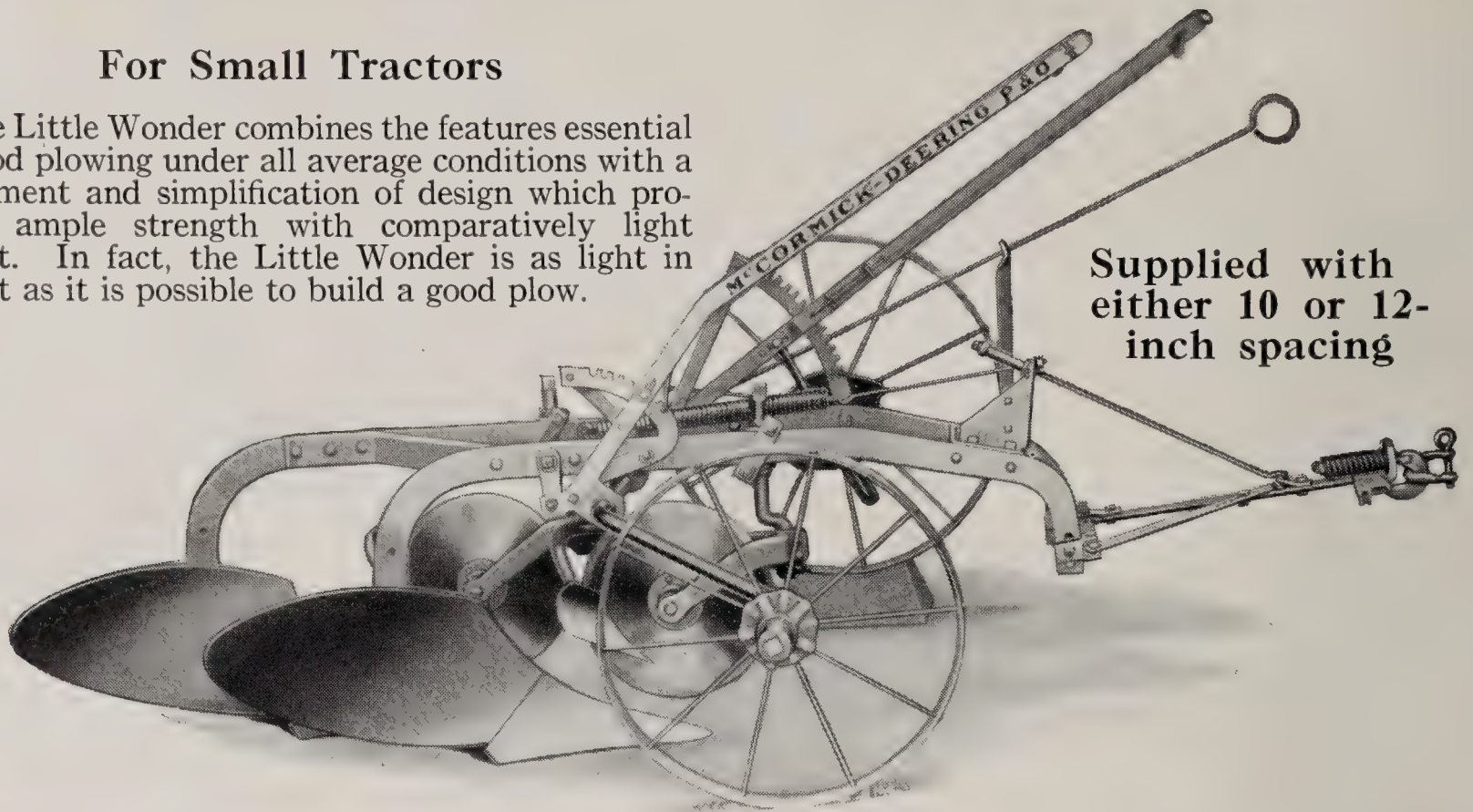




## McCormick-Deering P&O Little Wonder Tractor Plow

### For Small Tractors

The Little Wonder combines the features essential to good plowing under all average conditions with a refinement and simplification of design which provides ample strength with comparatively light weight. In fact, the Little Wonder is as light in weight as it is possible to build a good plow.



Supplied with  
either 10 or 12-  
inch spacing

*Illust. 29—McCormick-Deering P & O Little Wonder Tractor Plow equipped with W-10 bottoms.*

### Rigid-Flexible Hitch

The Little Wonder hitch is flexible with respect to up-and-down motion when the plows are in the ground. This means that the up-and-down motion of the tractor cannot interfere with the good work of the plow. When the bottoms are raised the rear end of the plow is held off the ground by a link connection in the hitch; in other words, the Little Wonder hitch is an ideal combination of the rigid and flexible type of hitch. This feature is mighty important on a 2-wheel tractor plow.

### Power Lift

The 30-inch land wheel insures plenty of traction to operate the power-lift device. The bottoms go into and come out of the ground quickly. A special feature in the power-lift device is a retarding roller which prevents the bottoms from dropping instantly and thus avoids the danger of breaking the share points on hard ground.

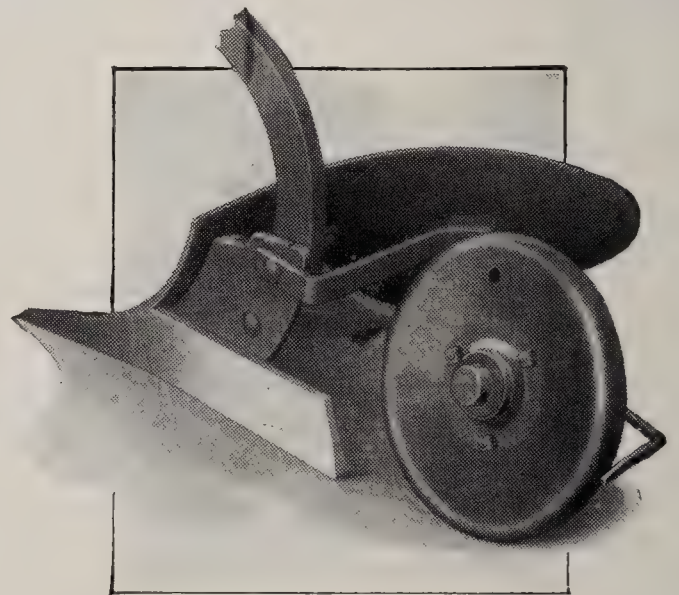
The levers project forward and can be reached from the tractor when the bottoms are in the ground.

### Strong and Well Balanced

Heat treatment of the beams gives ample strength without excessive weight. The beams are longer than on similar plows, which places the hitch where it belongs and insures a steady running plow.

Strong springs counterbalance the bottoms, making them easy to raise. The wheels are so located as to balance the plow correctly, both when plowing and when the bottoms are raised.

The rear bottom on the Little Wonder is equipped with an inserted, replaceable heel casting which is made of chilled iron. The heel of the landside always gets a great deal of wear on a plow of this type, and this replaceable heel makes it unnecessary to replace the whole landside when the heel wears.



*Illust. 30—This shows the rear wheel attachment which can be supplied as an extra for the Little Wonder Plow.*

### Specifications—McCormick-Deering Little Wonder Tractor Plow

Size	Regular Bottom (All Sizes)	Extra Bottoms (All Sizes)	Regular Equipment (All Sizes)	Approx. Weight
Two Bottom	W-10, 10"	V-10, 8", 10" X-10, 7", 8"	Coulters and Jointers Spring Release Hitch	525 lbs.

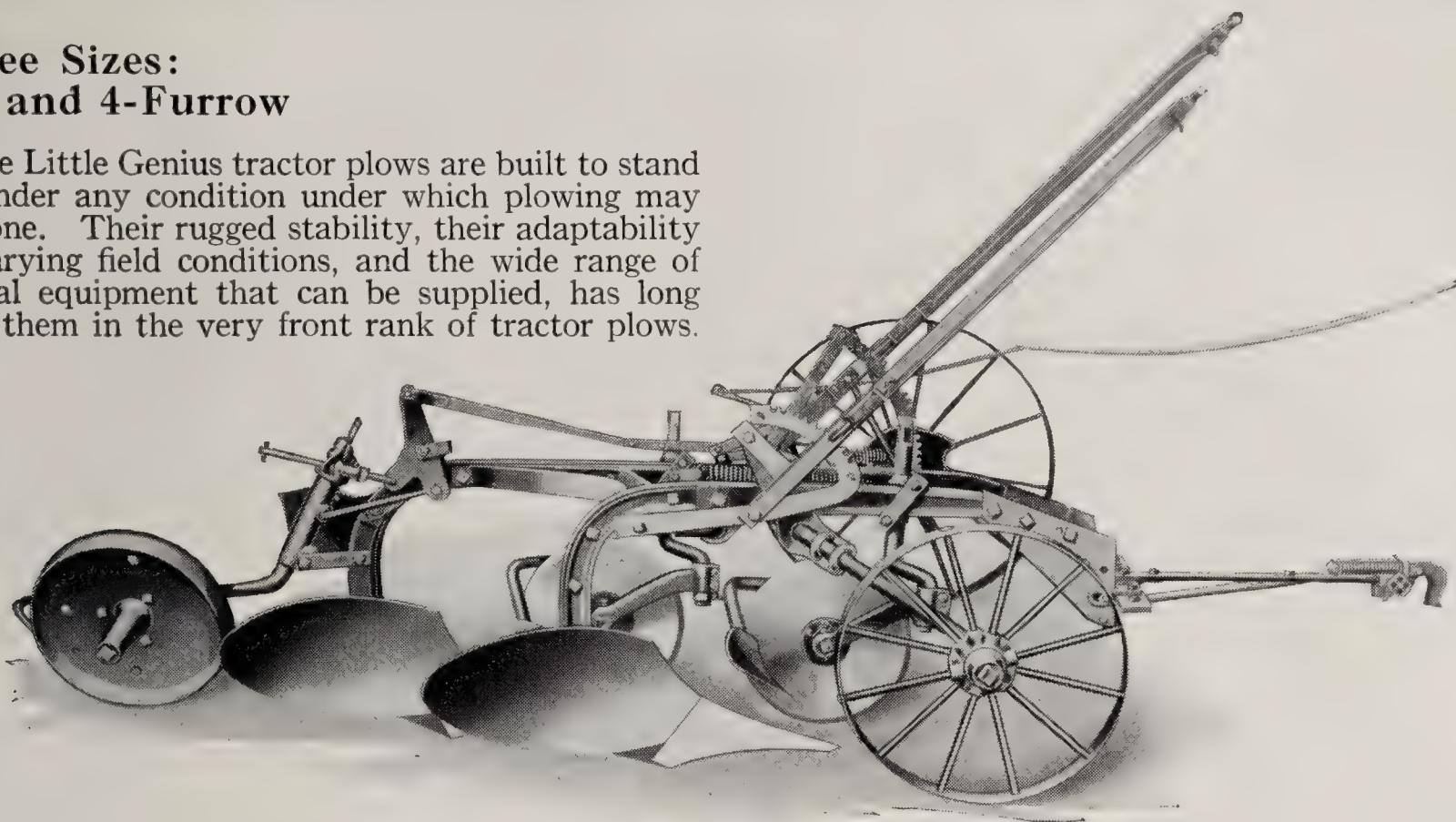




## McCormick-Deering P&O Little Genius Tractor Plows

### Three Sizes: 2, 3 and 4-Furrow

The Little Genius tractor plows are built to stand up under any condition under which plowing may be done. Their rugged stability, their adaptability to varying field conditions, and the wide range of special equipment that can be supplied, has long kept them in the very front rank of tractor plows.



*Illust. 31—Number 8 Two-bottom Little Genius Tractor Plow.*

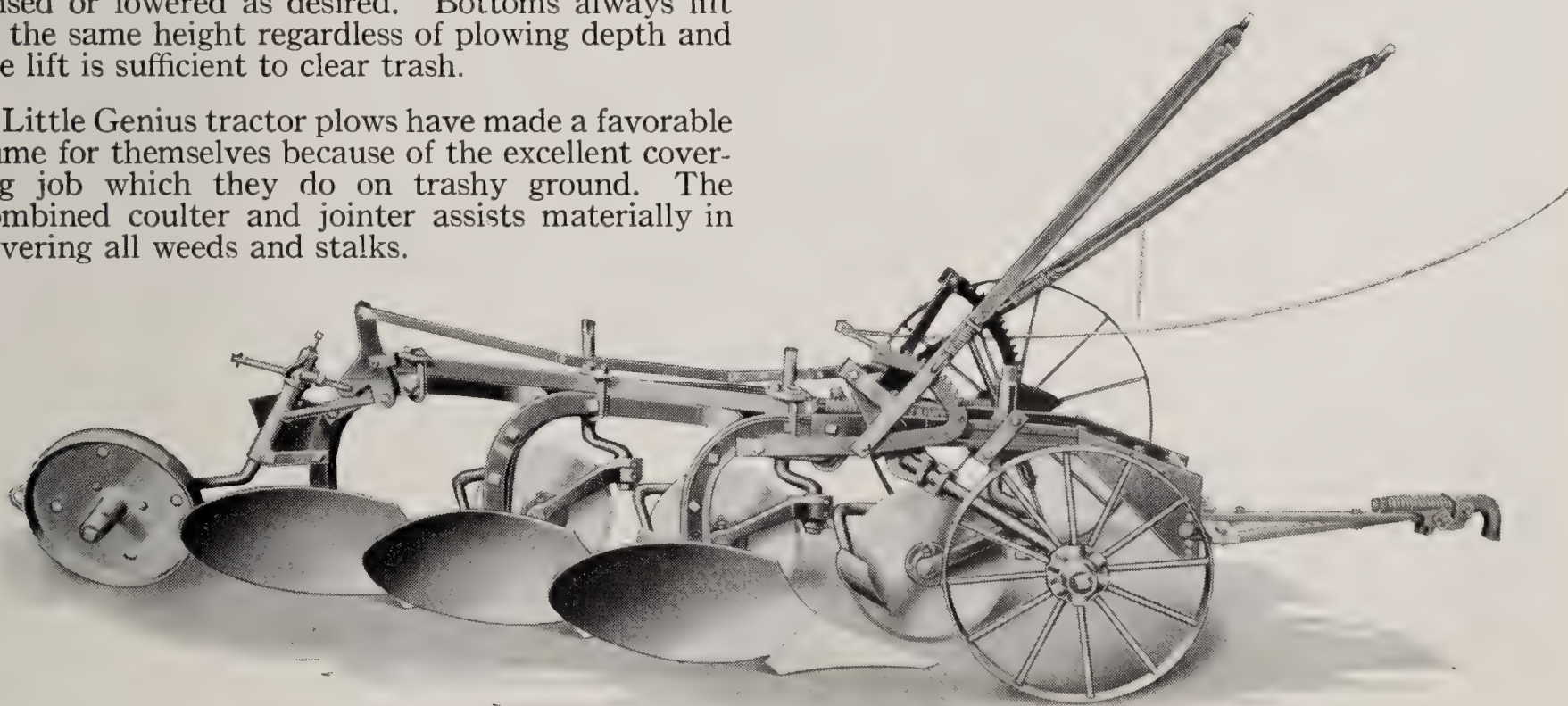
### Simple Power Lift

The power-lifting device built in regularly on all Little Genius tractor plows is simple, strong and durable. Nothing flimsy or complicated. One pull on the trip rope engages the mechanism which operates from the land wheel and the bottoms are raised or lowered as desired. Bottoms always lift to the same height regardless of plowing depth and the lift is sufficient to clear trash.

Little Genius tractor plows have made a favorable name for themselves because of the excellent covering job which they do on trashy ground. The combined coulter and jointer assists materially in covering all weeds and stalks.

### Coulters and Jointers

Rolling coulters are made of the finest grade of steel, carefully ground and polished and set in chilled cone bearings, which can be taken up for wear. Shanks are extra heavy. Jointers can be removed if not needed.



*Illust. 32—Number 8 Three-bottom Little Genius Tractor Plow.*

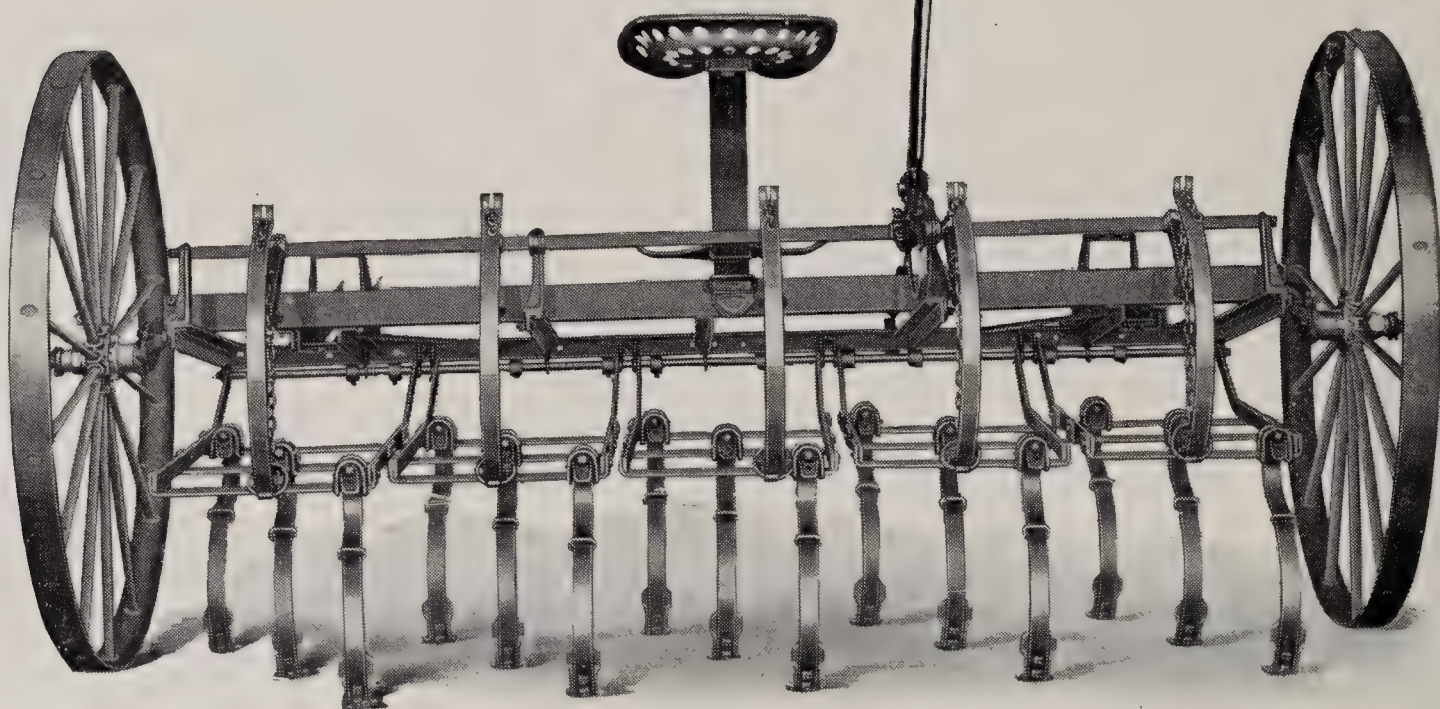
### Specifications—McCormick-Deering Little Genius Tractor Plows

Sizes	Regular Bottom (All Sizes)	Extra Bottoms (All Sizes)	Regular Equipment (All Sizes)	Approx. Weight
Two Bottom Three Bottom Four Bottom	W-10, 10''	V-10, 8'', 10'' X-10, 7'', 8''	Coulters and Jointers Spring Release Hitch	854 lbs. 1041 lbs. 1467 lbs.





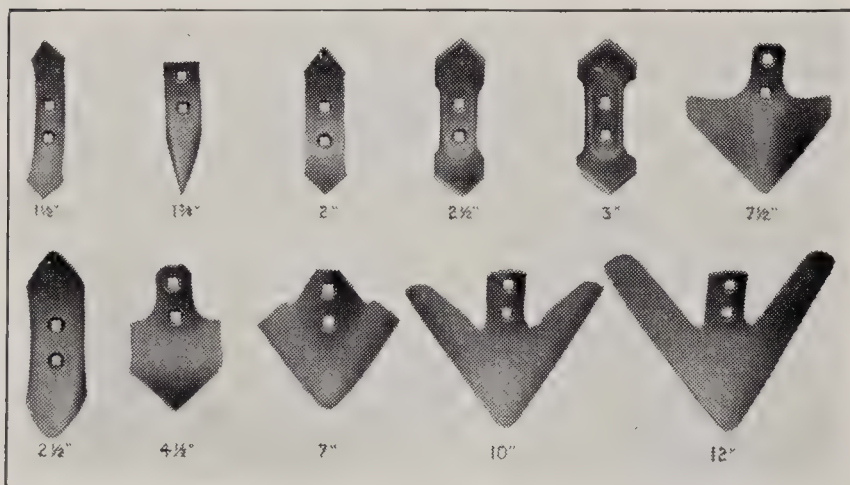
## McCormick-Deering Field Cultivators



*Illust. 1—McCormick-Deering Field Cultivator equipped with spring tooth gangs and reversible points.*

### Best Weeder Made

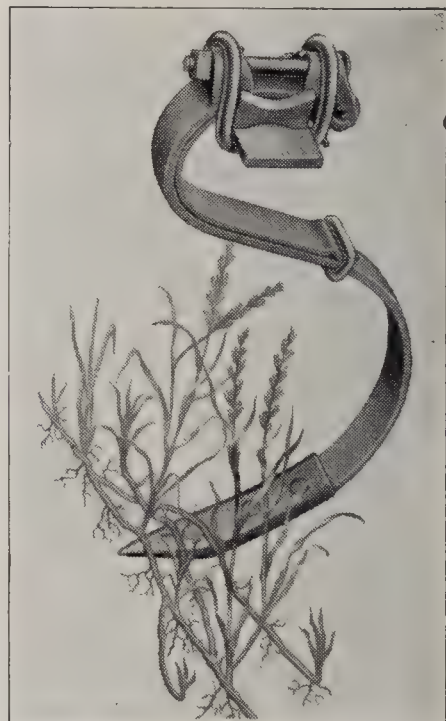
A great deal of time and thought has been put into the new McCormick-Deering field cultivator. It represents the best efforts of International designers who have been studying the cultivating needs of the farmer for many years. Changes have been made here and there, calculated to strengthen it against breakage and increase its efficiency as a weeder and a tillage tool. It is well known and well liked throughout Canada because of its light draft, its exceptional clearance for trash, and its durability under severe field conditions.



*Illust. 2—Shovels and points which can be supplied for either stiff or spring-tooth gangs.*

### Quack Grass Points

Special points can be supplied for use in eradicating quack grass. Quack grass cannot be killed by cutting it off at the surface of the ground, nor can it be killed by slicing off the roots beneath the surface. At each point where a root is cut new shoots will spring up. To effectively eradicate quack grass the roots must be lifted to the surface where they will wither and die in a hot sun, or where they can be raked and burned. The McCormick-Deering quack grass point is specially designed for this purpose. The tooth itself is oval, with no sharp edges to cut or tear the roots, and the teeth are mounted at a sharp angle so they glide under the roots, lifting them out. The springy action of the gangs frees the roots from most of the clinging soil, leaving them exposed to the air and sun.



*Illust. 3—The special quack grass point.*

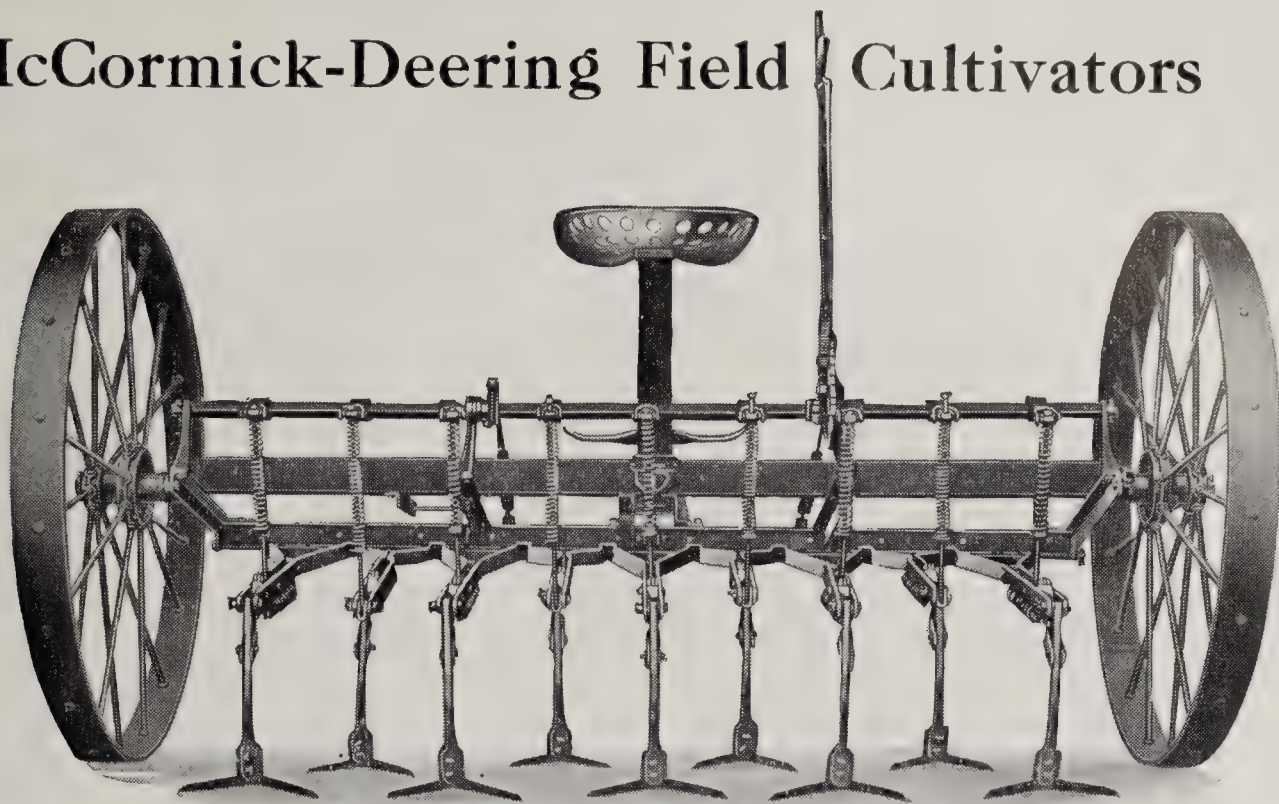
### Specifications—McCormick-Deering Field Cultivator

Size	Wheels	Tire	No. of Teeth		Hitch	Shovels and Points All Sizes	Power Lift and Tractor Hitch	Approx. Weight	
			Stiff	Sprg.				Stiff	Spring
6 -ft.	50-in.	3-in.	9	12	2 or 3-Horse 3-Horse 6-Horse	Regular 10", Sweeps on Stiff Tooth	Extra Extra Extra Regular	718 lbs.	652 lbs.
7 1/2 -ft.	50-in.	3-in.	11	15		Regular 2 1/2" Teeth on Spring Tooth		888 lbs.	811 lbs.
9 -ft.	48-in.	4-in.	13	18		Special 2 1/2, 4 1/2 or 7" Teeth on Stiff Tooth		1130 lbs.	1049 lbs.
12 -ft.	48-in.	4-in.	17		Tractor	Special 1 1/2, 4 1/2 or 7" Teeth on Spring Tooth		1727 lbs.	





## McCormick-Deering Field Cultivators



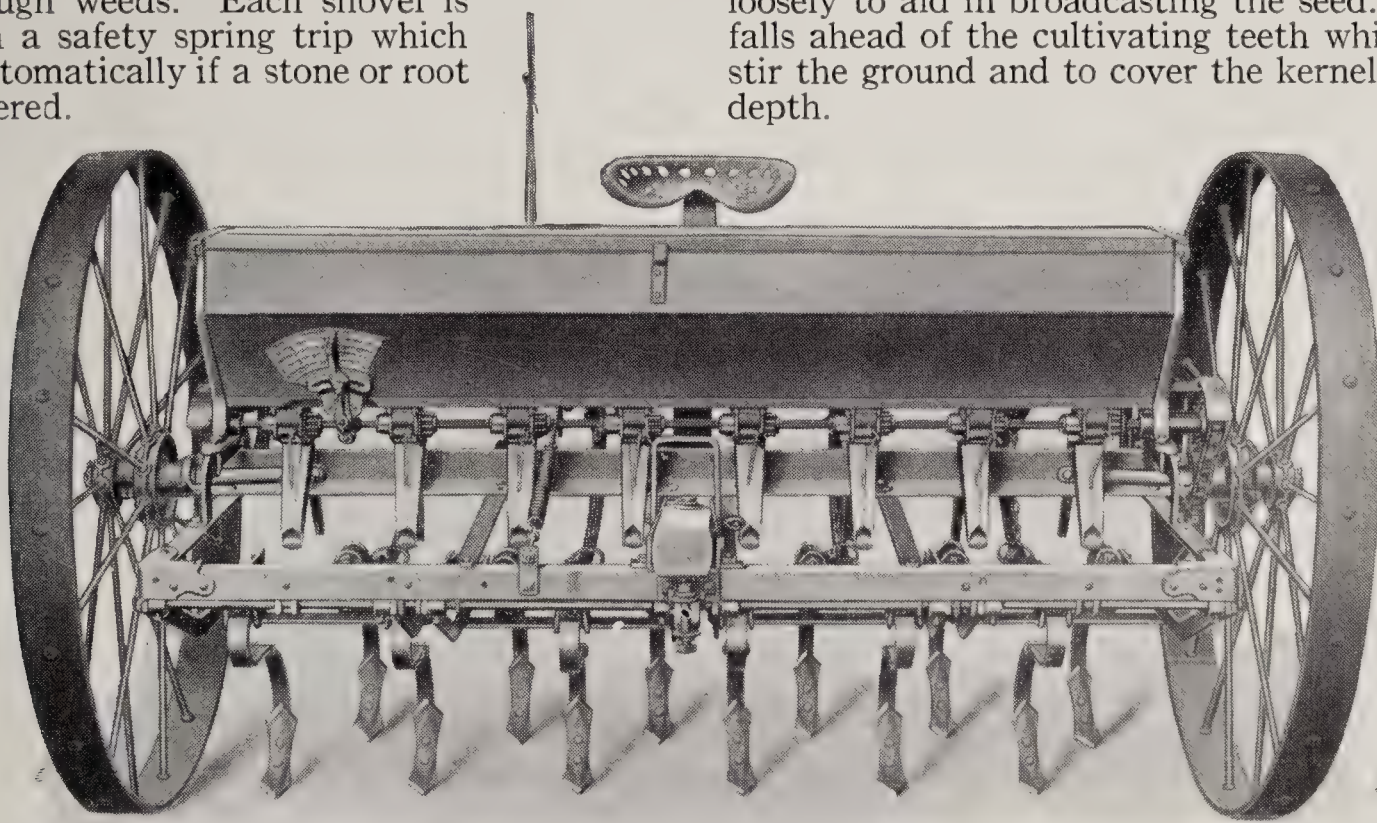
*Illust. 4—McCormick-Deering 6-foot Field Cultivator.*

### Stiff or Spring Teeth

Stiff teeth can be substituted for spring teeth on same frame if they are desired. Gang drawbars are much heavier than those used on the average cultivator. Two flat steel bars form the backbone of each stiff tooth gang and separate widely in front where they are attached to the main frame. These wide bearings offset any tendency to dodge around tough weeds. Each shovel is fitted with a safety spring trip which releases automatically if a stone or root is encountered.

### Used as a Seeder

On many farms in Eastern Canada the McCormick-Deering field cultivator is used as a broadcast seeder. This is accomplished by ordering a grain hopper for the 6 or 7½-foot sizes. The necessary gears and chains are included to attach to the ground wheel which operates the seeding mechanism. Fluted force feed is used, and the grain spouts hang loosely to aid in broadcasting the seed. The grain falls ahead of the cultivating teeth which follow to stir the ground and to cover the kernels at uniform depth.



*Illust. 5—McCormick-Deering 6-foot Field Cultivator equipped with grain hopper for broadcasting seed.*

### Easy to Operate

The penetration of the shovels is regulated by pressure springs and by a three-hole adjustment on the gangs which controls the penetrating angle or "suction" of the shovels. In addition to this adjustment, provision is made for raising and lowering the front of the frame to which the gangs are attached, to level the gangs for various depths of penetration.

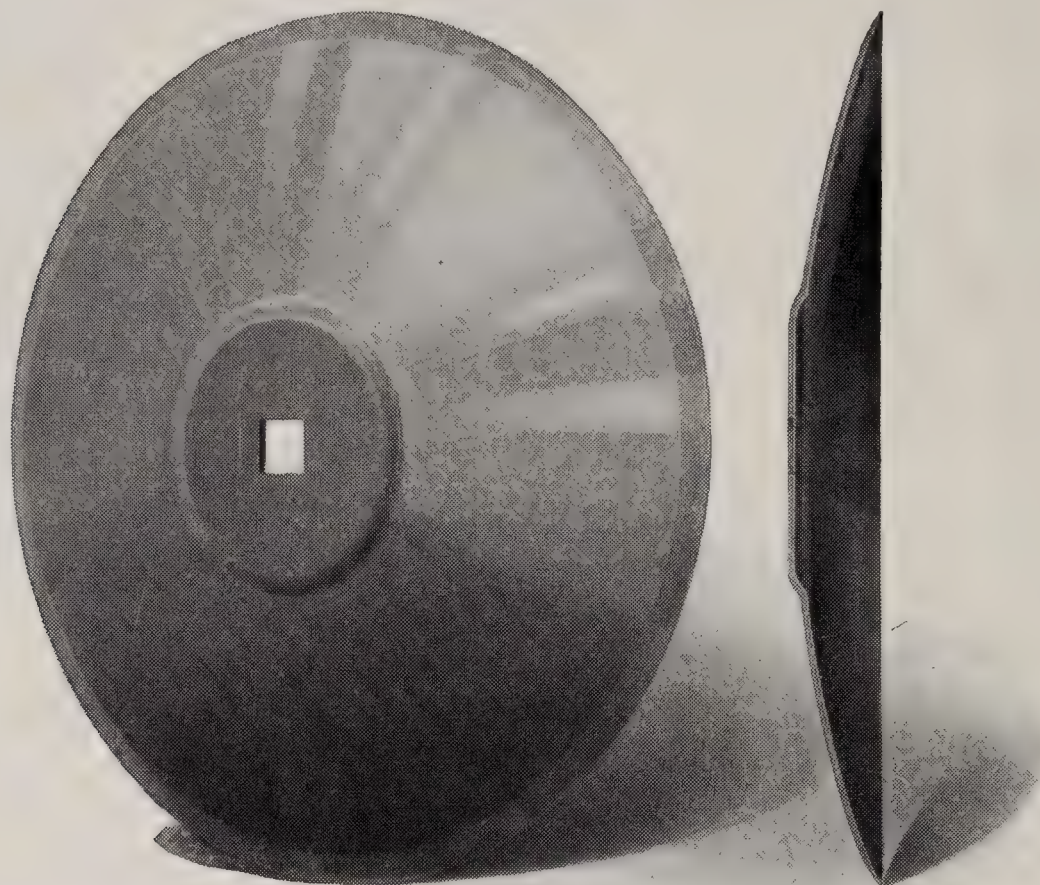
### Power Lift

The 12-foot size is regularly equipped with a tractor hitch and power lift. Both tractor hitch and power lift can be supplied for the 6, 7½ and 9-foot machines. The hand-lift lever is not removed when the power lift is attached. This enables the operator to use the power lift with rope connection from the tractor seat, or he can use either the power lift or hand lever when the machine is horse drawn.





## McCormick-Deering Disk Harrows Are Equipped with Heat-Treated, Crimped-Center Disks



*Illust. 1—The McCormick-Deering Heat-Treated Crimped-Center Disk. Have you ever noticed that a tin pail with straight sides is practically always crimped an inch or two from the top? It is surprising how that crimp stiffens the pail. The crimped center of the McCormick-Deering disk has a similar stiffening effect. The result is a disk that will stand up to the hardest kind of usage.*

### Last Longer, Draw Lighter, Do Better Work

The increasing use of tractors for power has made it desirable to produce a disk that would hold its edge longer and stand up better to the more severe usage occasioned by the unyielding power of the tractor. The new McCormick-Deering heat-treated, crimped-center disk is the result of the desire to produce a better disk for tractor harrows. It has proven so good that, in line with the Harvester policy always to increase quality wherever possible, it has been made regular equipment on all McCormick-Deering harrows—horse as well as tractor.

#### Why They Stay Sharp

McCormick-Deering harrow disks have always been made from a very fine grade of steel; in fact, the kind of steel that is used in circular saw blades. It has been found that by subjecting these disks to a special heat-treating process an extreme fineness of grain is secured. The disks are so toughened, tempered, and hardened as to hold their edge surprisingly long even when cutting and cultivating the toughest, hardest, rockiest soil.

The combination of tempered steel with the new

crimped center enables these disks to absorb shocks and strains without injury. This increase in hardness, strength, and durability is of special importance in sections where cornstalks or other surface trash are to be cut or where boulders buried stumps, etc., are common.

#### The Crimped Center Adds from 50 to 100% to Strength

When a harrow disk encounters the sloping side of a boulder or other obstacle it is subjected to a pull against all the other disks. The result is a terrific strain on the disk around the flange of the arbor bolt spool. On the ordinary disk this strain comes just at the edge of the flange on the spool and on the mere thickness of the disk. On the new McCormick-Deering crimped-center disk the strain comes edgewise on the steel between the two curves of the crimp. (A flat board will support a heavier load edgewise than it will flatwise.) At the same time the strain is distributed over a wider area and the result is a disk that in actual tests has been shown to be from 50 to 100 per cent stronger at the center than the ordinary disk.

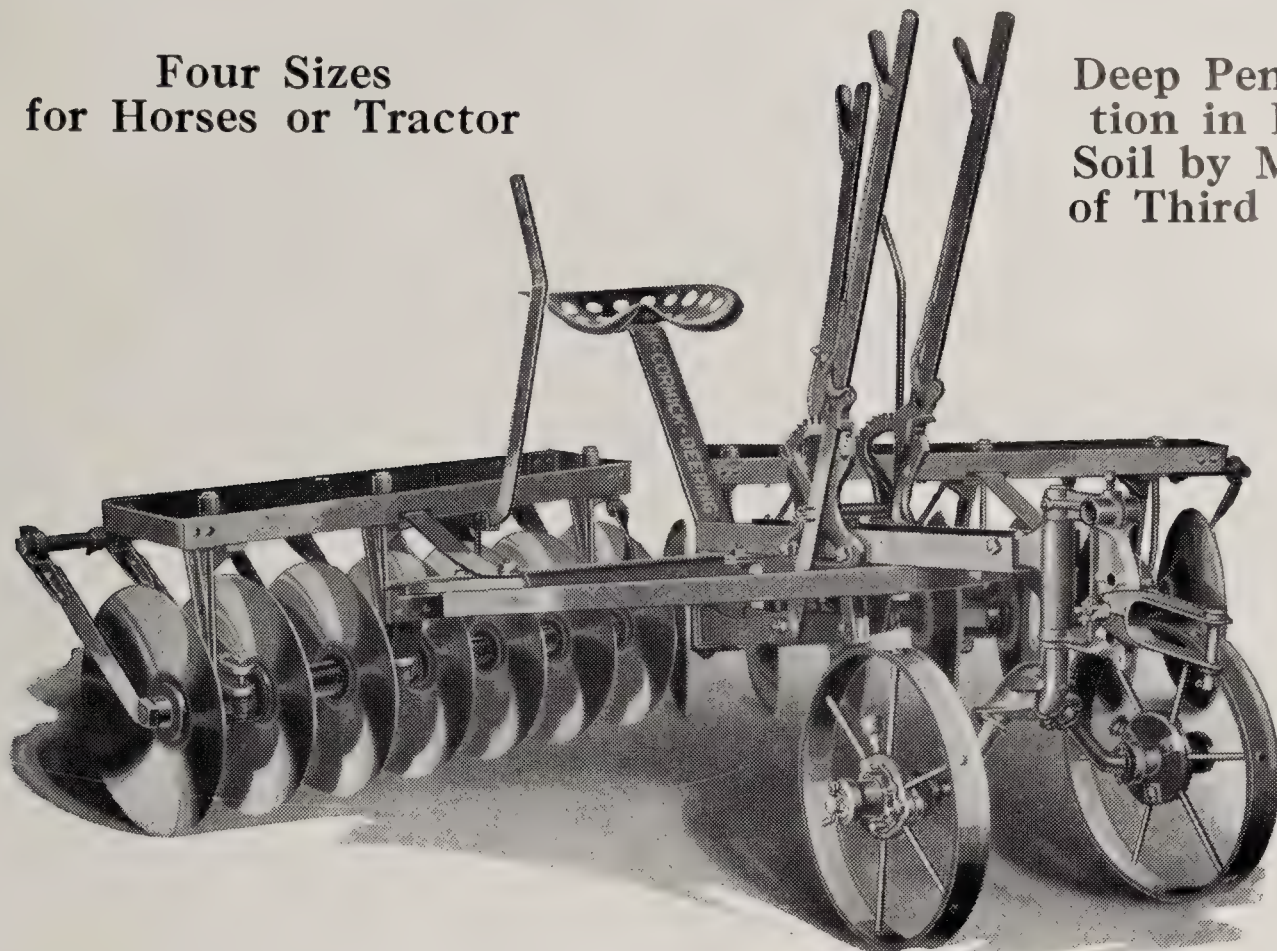




## McCormick-Deering Out-Throw Disk Harrows

Four Sizes  
for Horses or Tractor

Deep Penetra-  
tion in Hard  
Soil by Means  
of Third Lever



*Illust. 2—McCormick-Deering 7-foot Single Disk Harrow, showing forecarriage, which is extra.*

### Solid One-Piece Main Frame

Main frame is a single piece of high-grade angle steel shaped to reach from one end of the harrow to the other without joints or hinges. Cross-braced with a heavy angle steel bar.

### Steel Standards

The steel standards are placed edgewise to the direction of travel, giving the maximum amount of clearance between the standards and the disks. The oil pipes are directly behind the standards, out of danger of breakage.

### Strength and Rigidity

The angle steel stub tongue acts as the backbone to give additional strength and rigidity to the frame. It is so constructed that either a wood tongue or a forecarriage can be used simply by removing and bolting the other unit in the same holes. The steel stub tongue forms a solid foundation for the gang set levers which are placed within easy reach of the driver.

### Effective Scrapers

The scrapers can be adjusted to or from the disks, or they can be set to clear the disks when not needed. Convenient hand lever, easily operated by the driver from the seat, or by ropes from the tractor, keeps the disks clean.

### Reversible Bushings

Each bearing is fitted with two hard wood bushings that completely encircle the bearing spool. These can be reversed four times as they wear and by doing so lengthen the service of the harrow.

### For Horse or Tractor Power

McCormick-Deering disk harrows can be used with horses or with tractors to produce a perfect seed-bed. Tractor hitch with short stub tongue can be supplied at extra cost. This tongue fits into the same holes as the forecarriage and can be put on in a few moments. It is adjustable for several different heights of tractor drawbar. It is never safe to use a forecarriage with a tractor.

### Specifications—McCormick-Deering Out-throw Disk Harrows

Size	No. of Disks	Diam. of Disks	Kind of Disks	Hitch	Approx. Weights	Attachments for All Sizes
6-foot	12	16-inch	Solid	3-Horse	491 lbs.	Tandem Forecarriage Transports Neckyoke Centertooth Tractor Hitch
7-foot	14	16-inch	Solid	3-Horse	547 lbs.	
8-foot	16	16-inch	Solid	4-Horse	641 lbs.	
10-foot	20	16-inch	Solid	4-Horse	704 lbs.	

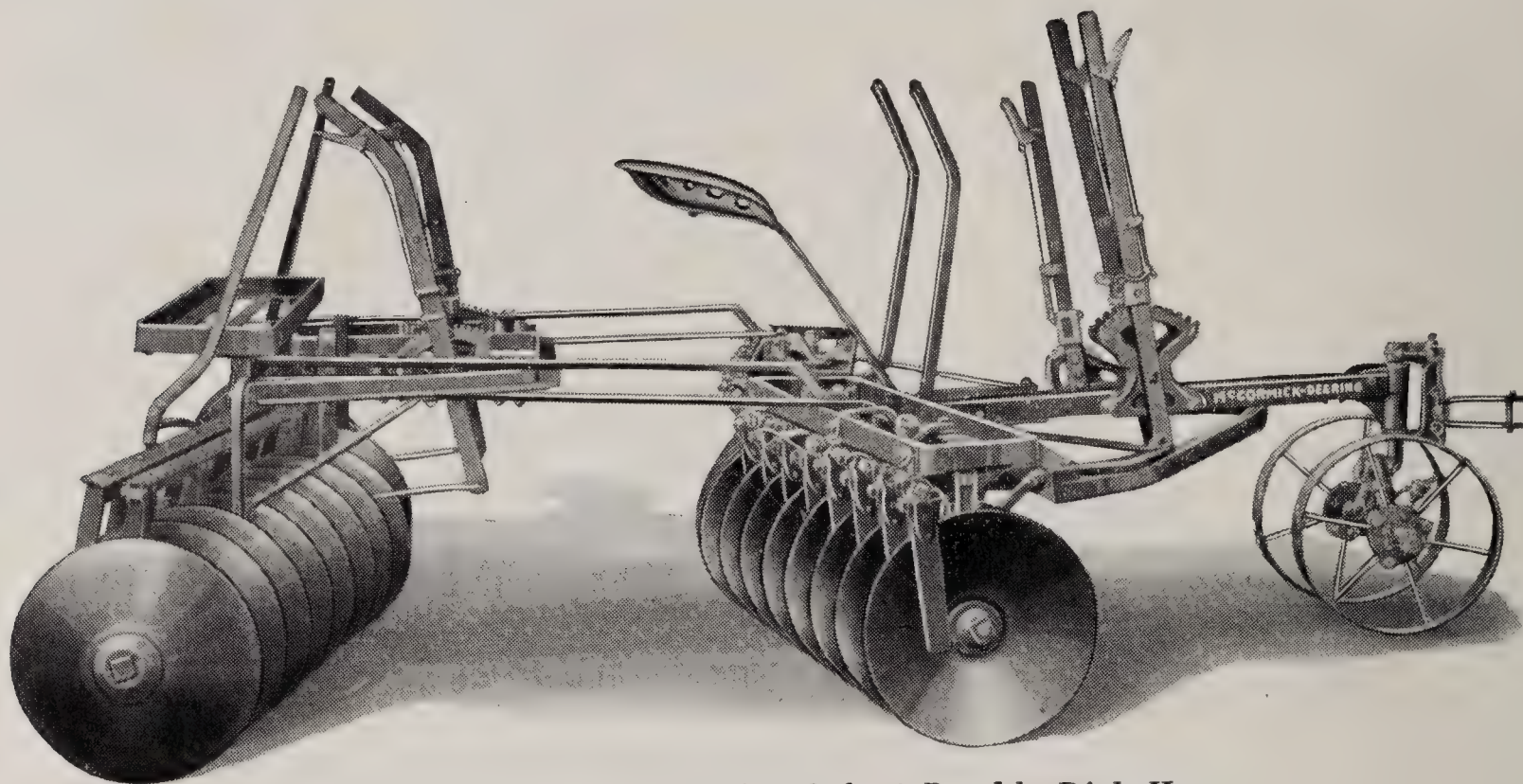
All sizes equipped regularly with long pole, built-in weight boxes, third lever depth regulator, and scrapers.





## McCormick-Deering Double Disk Harrows

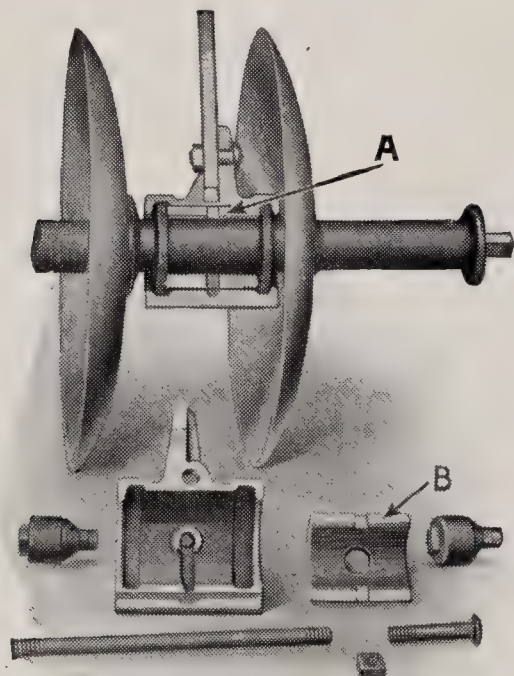
Rigid While Working—Flexible While Turning



*Illust. 3—McCormick-Deering 8-foot Double Disk Harrow.*

### Rigid Tandem Attachment

Any McCormick-Deering disk harrow can be equipped with tandem attachment of the same width, as shown in the illustration above. The blades are set for inthrow instead of outthrow, which gives the soil a double pulverization.



*Illust. 4—McCormick-Deering Disk Harrow Bearings*

Letters A and B indicate the two halves of the hard wood bushing that completely encircles the hard iron spool. Grease is forced to the bearings by hard-oil cups conveniently located above the frame. Bushings are reversible four times. The entire bearing is enclosed with a dust cap and is as nearly dustproof as possible.

### Strong, Rigid Construction

Unlike the front harrow, the end thrust on the tandem attachment is all toward the outside. Thus it is impossible to neutralize this end thrust by means of bumpers, so a heavy steel arch is provided, reinforced by braces, and this arch holds the gangs tightly together, resisting the heavy pressure of the soil outward. The front frame is made of one piece of angle steel, cross-braced for strength and rigidity. Weight box is regular equipment on McCormick-Deering tandem harrows. It enables the owner to add more pressure on the work when advisable.

### Better Than Twice Over

The use of a tandem disk harrow is better for the soil than covering the same field twice with a single disk harrow. Many farmers are finding this out and it is coming to a point where there are very few harrows sold except with the tandem attachment. The double action of the inthrow and outthrow reduces the surface to a finely pulverized mulch, and it conserves a greater amount of moisture and therefore increases the crop production.

### No Trailing Possible

Each rear blade exactly splits the ridge formed by the two blades ahead of it. This position is unchangeable because of the unique and exclusive McCormick-Deering hitch that is used between the two sections.

### Specifications—Tandem Attachments

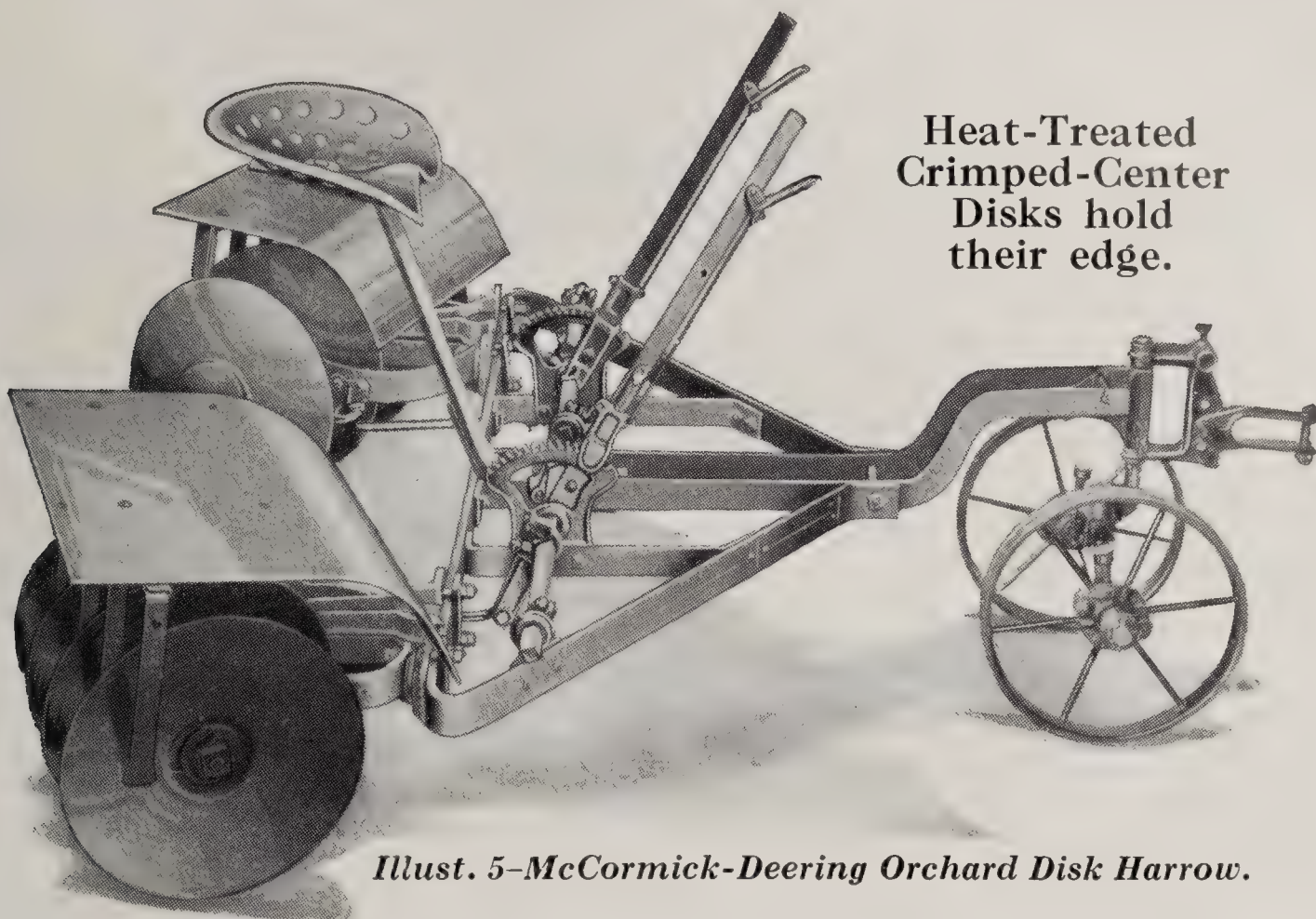
Sizes	No. of Disks	Kind of Disks	Approximate Weight
6-foot	12	Solid	384 lbs.
7-foot	14	Solid	431 lbs.
8-foot	16	Solid	528 lbs.
10-foot	20	Solid	591 lbs.

All sizes regularly equipped with scrapers and weight boxes.





## McCormick-Deering Orchard Disk Harrow



Heat-Treated  
Crimped-Center  
Disks hold  
their edge.

*Illust. 5—McCormick-Deering Orchard Disk Harrow.*

### Reversible and Adjustable

Gangs on this orchard disk harrow can be set to throw the soil toward or away from the trees or for hilling up crops planted in rows. They can also be placed close together for regular 4-foot disk-ing. The construction of the orchard disk harrow is low enough so that it can be used under low-hanging branches without injuring the foliage. Broad sheet steel shields cover the disk gangs to keep branches and leaves away from the sharp disk blades.

### Extension Frame Can Be Supplied

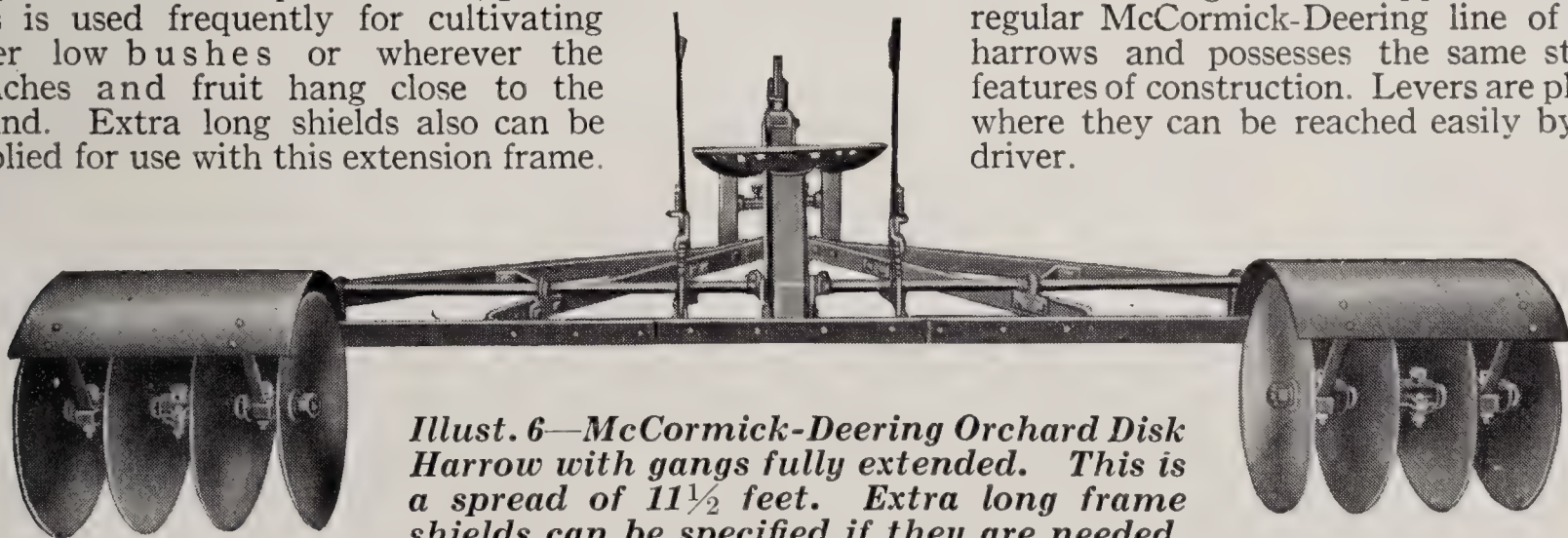
When specified, a wide extension frame can be supplied, at slight additional cost, that gives the gangs a maximum spread of  $11\frac{1}{2}$  feet. This is used frequently for cultivating under low bushes or wherever the branches and fruit hang close to the ground. Extra long shields also can be supplied for use with this extension frame.

### Quickly and Easily Adjusted

The gangs on the orchard disk harrow have a wide degree of adjustment. They can be set for outthrow or inthrow and they can be adjusted to cut deep or shallow next to the trees. All of these changes can be made very quickly and easily. Levers are placed within convenient reach of the driver whether the frame is extended or not.

### Forecarriage is Regular

A strong, substantial forecarriage is supplied regularly with McCormick-Deering orchard disk harrow. It keeps the harrow running in line with the draft and makes turning corners much easier. It is the same forecarriage that is supplied with the regular McCormick-Deering line of disk harrows and possesses the same strong features of construction. Levers are placed where they can be reached easily by the driver.



*Illust. 6—McCormick-Deering Orchard Disk Harrow with gangs fully extended. This is a spread of  $11\frac{1}{2}$  feet. Extra long frame shields can be specified if they are needed.*

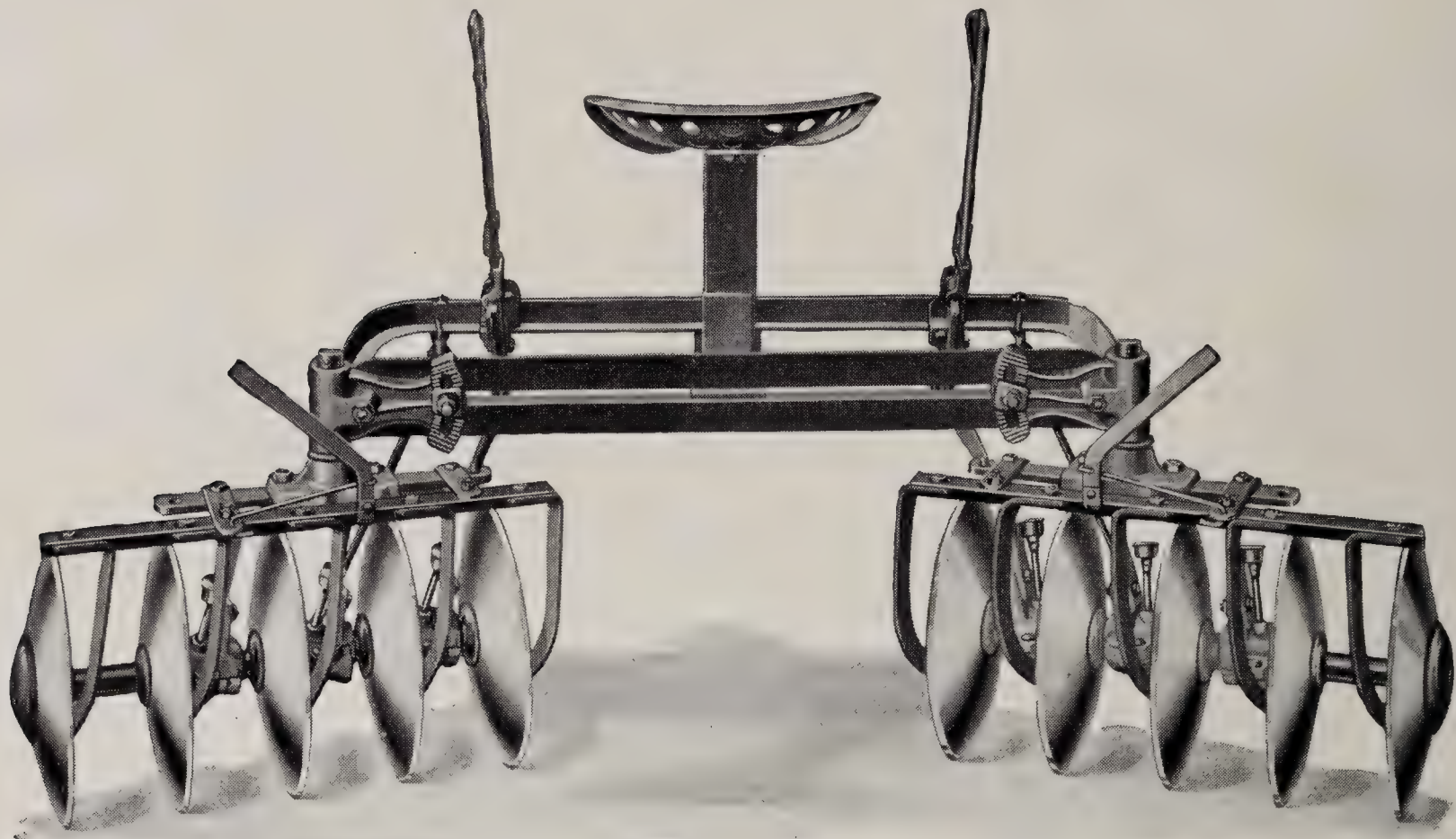
### Specifications—Orchard Disk Harrows

Sizes	Hitch	Weight 16-inch Disks	Weight 18-inch Disks	Attachments for all Sizes
8 Disks—4-foot 10 Disks—5-foot	2-Horse 2-Horse	422 lbs. 447 lbs.	448 lbs. 481 lbs.	Long Pole Extension Frame Extension Shields Scrapers





## McCormick-Deering Reversible Disk Harrow



*Illust. 7—McCormick-Deering 5-foot Reversible Disk Harrow with gangs set for inthrow.*

### Light Draft—Strong Construction

McCormick-Deering reversible disk harrow is built exceptionally strong for the work it has to do. The front and both sides consist of one continuous piece of angle steel bolted rigidly to the back frame, which is formed by two steel angles. The back angle bars are slightly separated, leaving a slot along which the gangs can slide to give the required disking width.

### Regular Equipment

Long pole and two-horse hitch, or thills.

### Extra Equipment

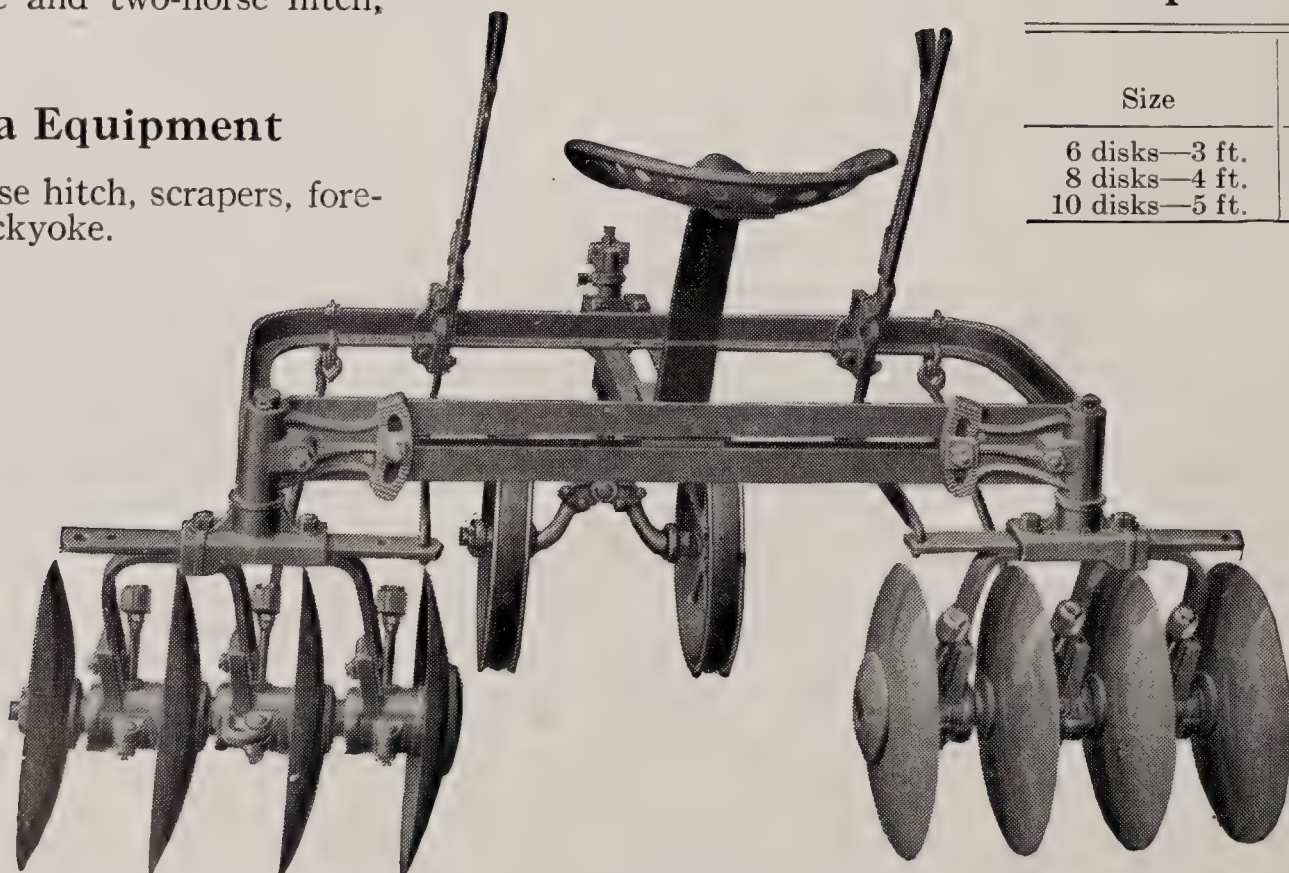
Three-horse hitch, scrapers, fore-carriage, neckyoke.

### Quickly and Easily Adjusted

McCormick-Deering reversible disk harrow can be used for inthrow or outthrow, for hilling the plants or throwing the dirt away. These operations are accomplished by adjusting the disk gangs or turning them end for end. The reversible disk harrow is not shipped regularly with forecarriage. Scrapers are not regular, but when needed can be secured on special order.

### Specifications

Size	Weight, 16-inch	Weight, 18-inch
6 disks—3 ft.	292 lbs.	312 lbs.
8 disks—4 ft.	334 lbs.	860 lbs.
10 disks—5 ft.	364 lbs.	388 lbs.

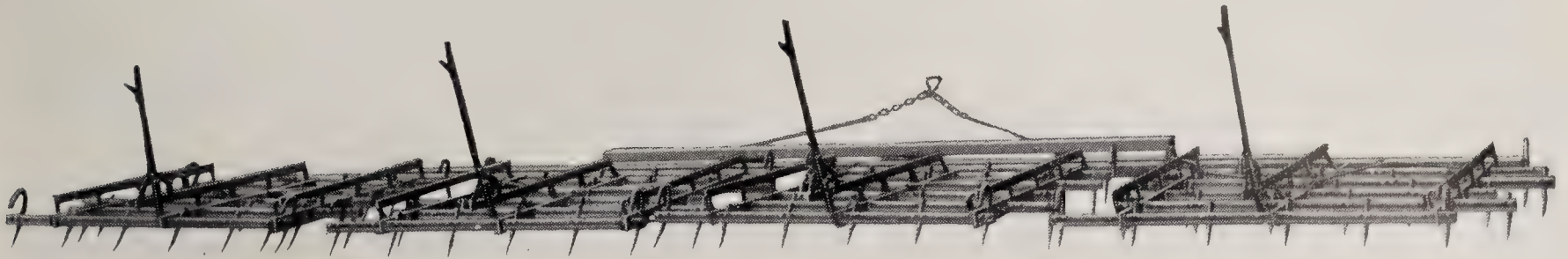


*Illust. 8—For throwing the dirt out, and straddling the row, the gangs are set as shown here.*





## McCormick-Deering Smoothing Harrows



*Illust. 1—McCormick-Deering Lever Set Smoothing Harrow. Channel steel tooth bars for greater harrow strength. Three cross braces hold each section rigid. Runner teeth at each corner for transporting.*

Three strengthening bars cross each section of this McCormick-Deering smoothing harrow to hold the section rigid on rough ground. They prevent twisted tooth bars because they distribute the strain. Teeth cannot work loose or drop off because they fit into notches in the U-shaped tooth bars and are held by U-bolts and two nuts. Teeth

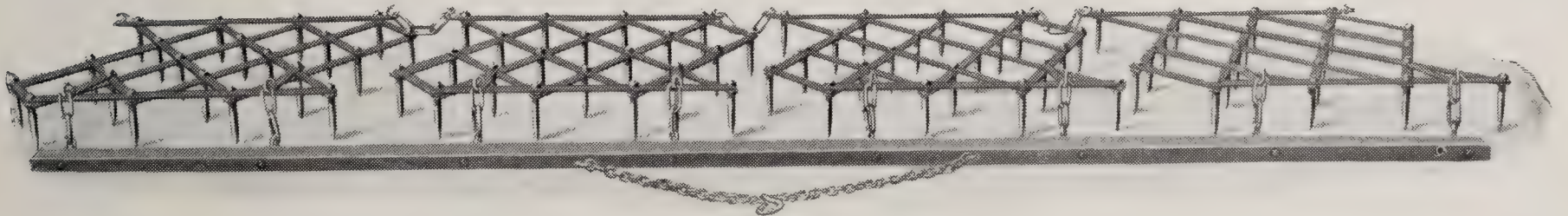
have upset heads, and are made of steel, tempered to give great strength. They are diamond shaped, which gives them sharp cutting edges. Levers have finely notched quadrants to provide ample adjustment for setting the tooth slant. Riding attachment can be purchased at extra cost and is well worth its price in the miles of weary walking that it saves.



*Illust. 2—McCormick-Deering Riding Sulky will fit all sizes and makes of smoothing or spring-tooth harrows.*

### New Riding Sulky

The sulky attachment which may be ordered extra is something new and different. It is stronger and more durable. The wheels are high with wide rims and good solid hubs with long bearings which do not become wobbly. There is plenty of room between the wheels and the frame bars for a driver to mount from the rear. At turns, the wheels and axle pivot to make a short turn without dragging. On the straight away they are locked in position.



*Illust. 3—McCormick-Deering Leverless Smoothing Harrow. Light and strong. Does excellent job of smoothing plowed ground.*

This harrow is both light and strong. The frame consists of channel and flat steel bars. Each section is fastened to the drawbar by two chains, making it an easy matter to add sections whenever desired.

The sections are connected to each other at the rear by chains, which permit each section to conform to the irregular surface of the ground. This harrow is furnished with three, four, five and six sections.

### Specifications—McCormick-Deering Smoothing Harrows

Size	Description		Width of Cut		Approx. Weight	
	20-Tooth	30-Tooth	20-Tooth	30-Tooth	20-Tooth	30-Tooth
1 section	20 teeth	30 teeth	3 ft. 4 in.	4 ft. 8 in.	52 lbs.	100 lbs.
2 section	40 teeth	60 teeth	6 ft. 8 in.	9 ft. 11 in.	117 lbs.	224 lbs.
3 section	60 teeth	90 teeth	10 ft.	15 ft.	178 lbs.	358 lbs.
4 section	80 teeth	120 teeth	13 ft. 4 in.	20 ft.	238 lbs.	478 lbs.
5 section	100 teeth		16 ft. 8 in.		305 lbs.	
6 section	120 teeth		20 ft.		363 lbs.	

30-tooth harrows shipped regularly with drawbar, two section and over.

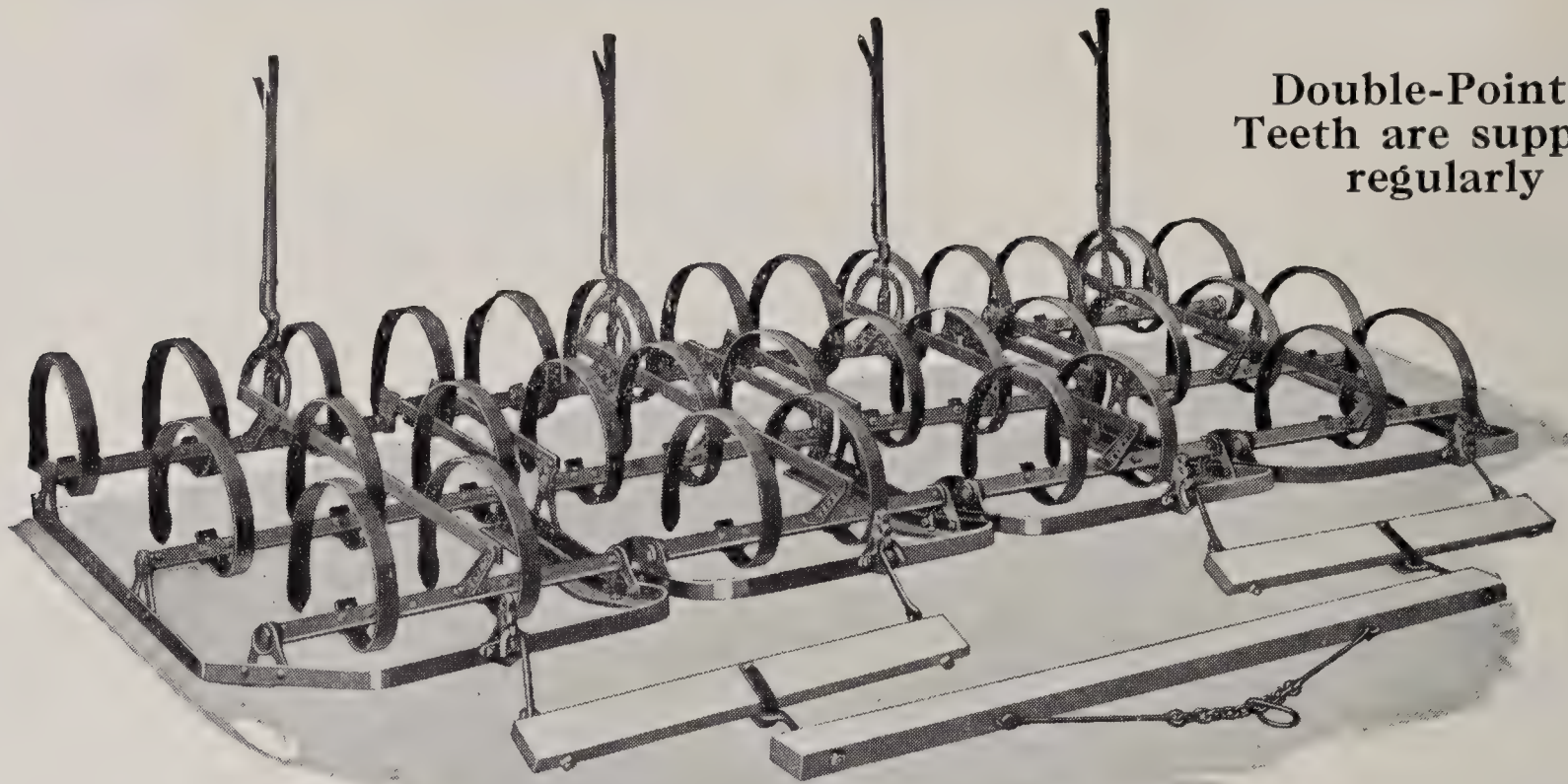
20-tooth harrows shipped regularly with drawbar, three section and over.

Attachments—Harrow cart for all sizes.





## McCormick-Deering Spring-Tooth Harrows



Double-Pointed  
Teeth are supplied  
regularly

*Illust. 4—Four-section Spring-Tooth Harrow. This size is suited for use with a farm tractor, but there are several sizes for use with horses.*

### Excellent Construction

All sizes of McCormick-Deering spring-tooth harrows are built for hard work under the roughest field conditions. Teeth are given a stretching test to eliminate defectives, and it is very rare to find one of these teeth broken in the field. The spring-tooth harrow is the greatest soil renovator ever designed. Equipped with special points, it is excellent for ridding fields of quack grass.

### A Tractor Size

The tractor owner makes more out of his tractor by using it for as many purposes as possible. Therefore this four-section McCormick-Deering spring-tooth harrow has been designed for tractor use. The general construction is the same as the smaller sizes except that four sections are linked together with flexible connections which permit the harrow to follow rough ground closely.

### Specifications—McCormick-Deering Lever Spring-Tooth Harrows

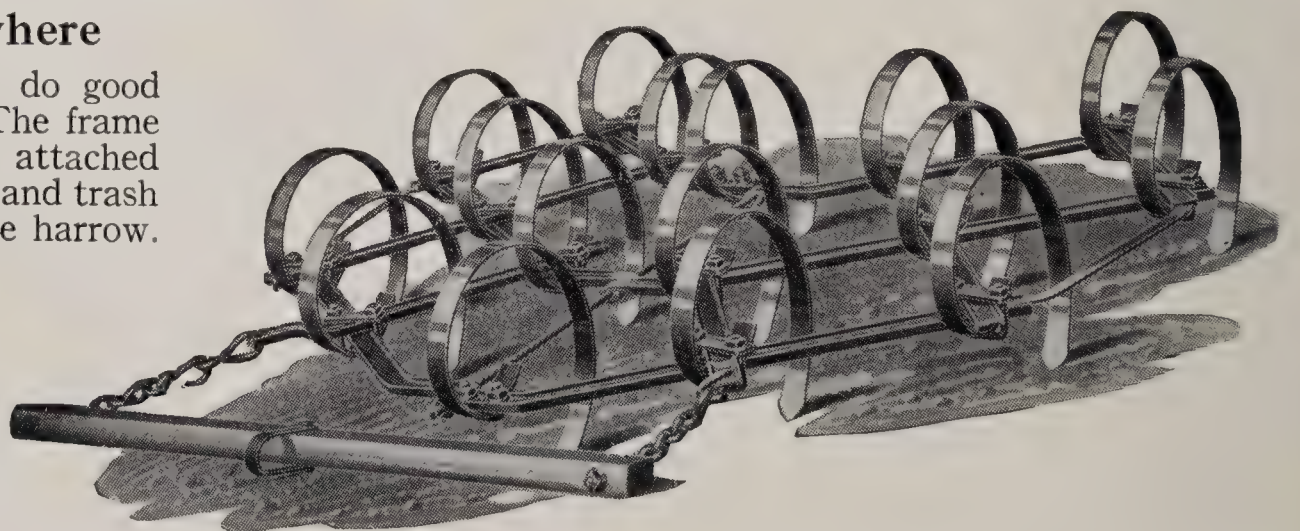
Size	Description	Width of Cut	Approx. Weight	Attachments for all sizes
9-tooth	Without handles	2 feet 6 inches	117 lbs.	Plain Teeth Alfalfa Teeth Quack-Grass Teeth Sulky Attachment
9-tooth	With handles	2 feet 6 inches	130 lbs.	
15-tooth	2 section	4 feet 9 inches	218 lbs.	
17-tooth	2 section	5 feet 4 inches	232 lbs.	
23-tooth	2 section	7 feet 3 inches	290 lbs.	
25-tooth	3 section	8 feet	359 lbs.	
31-tooth	4 section	11 feet	480 lbs.	
33-tooth	4 section	12 feet	491 lbs.	

Regular equipment: Reversible teeth; drawbar for two section and over.

### A Favorite Everywhere

The leverless harrow will do good work in any kind of soil. The frame is so shaped and the teeth attached in such a manner that weeds and trash work out and away from the harrow.

This type of McCormick-Deering spring-tooth harrow is furnished in two sizes, 12 and 16-tooth. One and one-quarter inch teeth are regular. On special order, the 16-tooth harrow will be furnished with 1½-inch teeth.

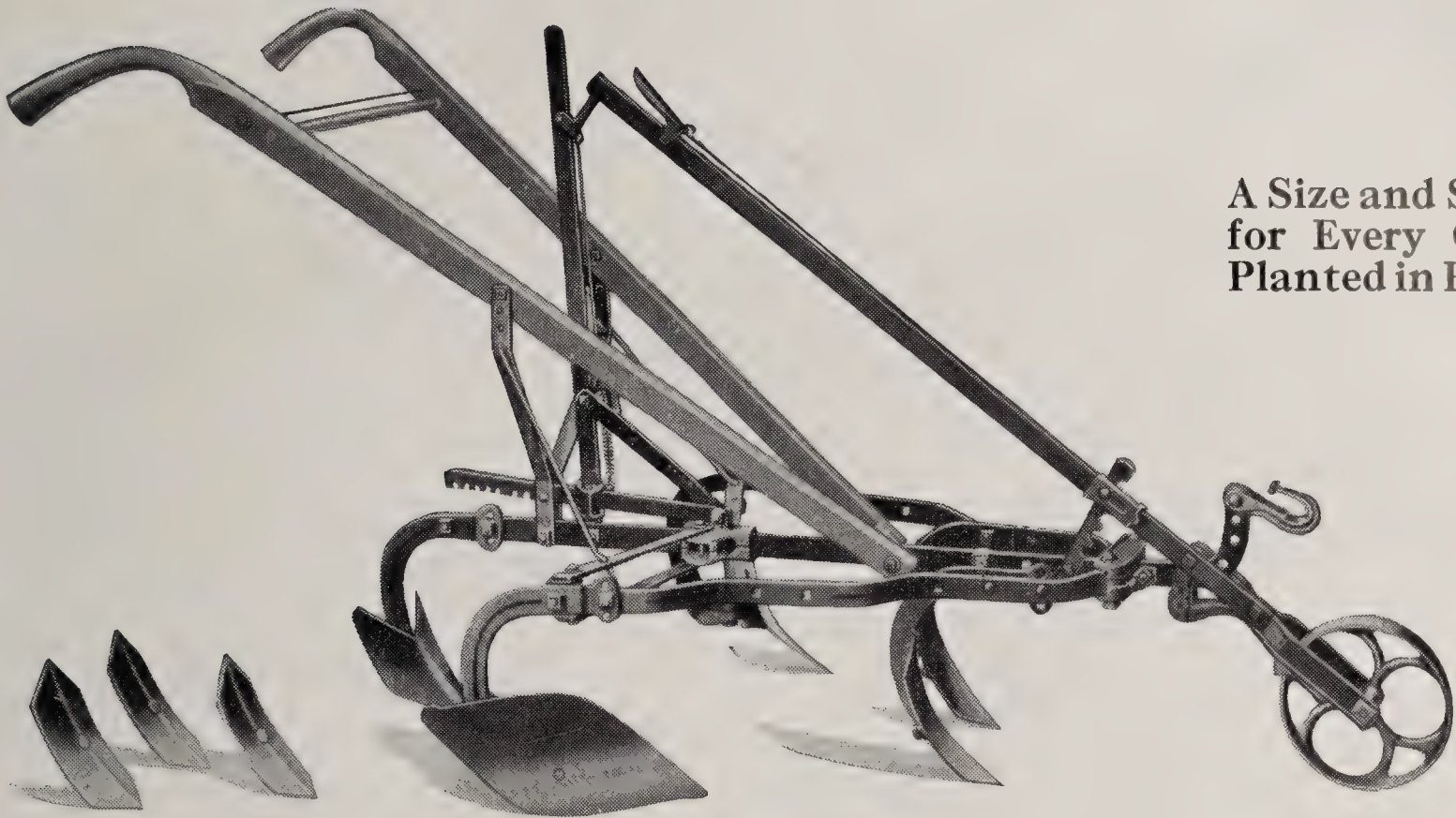


*Illust. 5—McCormick-Deering leverless Spring-Tooth Harrow is made in two sizes, 12 and 16 teeth.*





## McCormick-Deering Scufflers



A Size and Style  
for Every Crop  
Planted in Rows

*Illust. 1—McCormick-Deering No. 55 Scuffler as regularly equipped.*

### Always Pay Their Way

One of these handy little tools will pay good returns on any farm where there is a garden or row crops to be cultivated. The construction is strong and durable, while the draft is light for one horse. A boy can operate them easily.

### Three Varieties

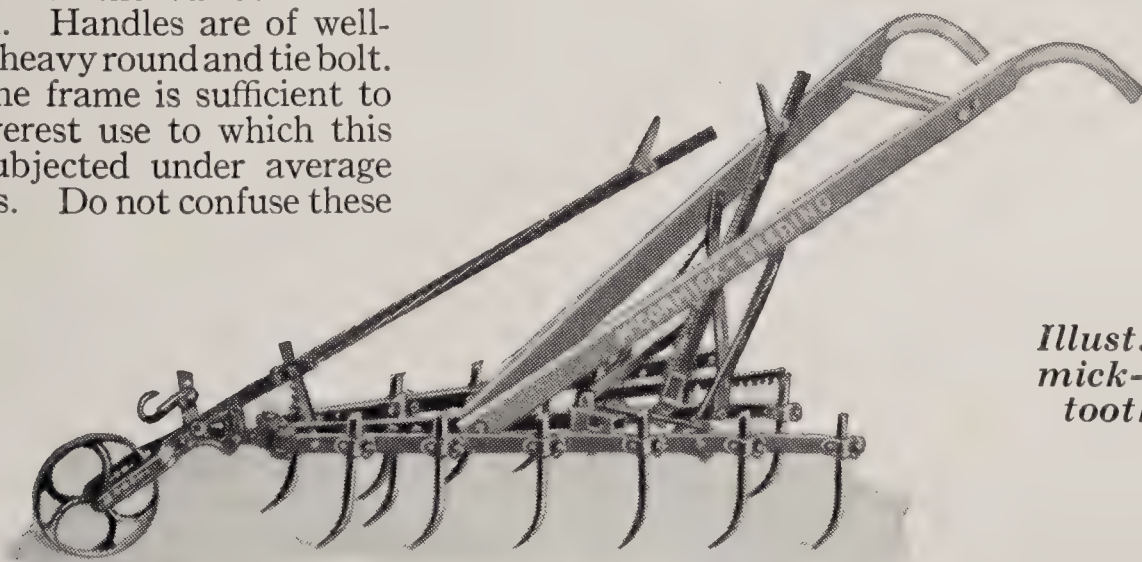
McCormick-Deering scufflers are built with three varieties of equipment. No. 55 as illustrated above; No. 75 with seven teeth; and No. 95 with nine teeth.

The construction of the various cultivators is identical. Handles are of well-seasoned oak, with heavy round and tie bolt. The strength of the frame is sufficient to withstand the severest use to which this scuffler will be subjected under average working conditions. Do not confuse these

sturdy little cultivators with the cheaply built scufflers offered at a lower price.

### Fourteen-Tooth Scuffler

This is the handiest little weeder that you can find. It is well built with straight side bars to which the diamond-shaped teeth are securely bolted. Three adjustments are provided for changing the cutting angle of the teeth. Set-lever narrows or widens the width of cut.



*Illust. 2—McCormick-Deering 14-tooth Scuffler.*

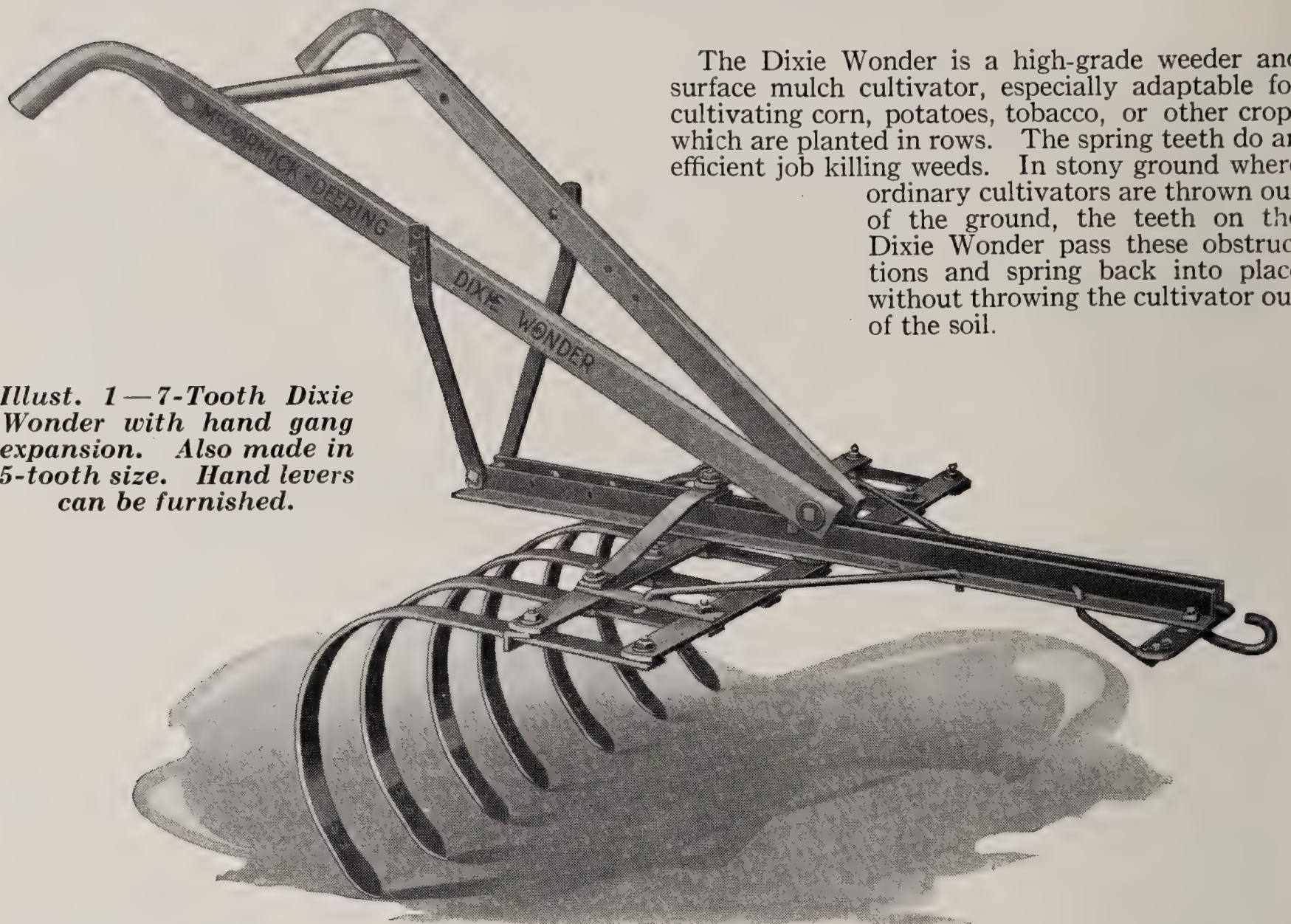
### Specifications—McCormick-Deering Scufflers

Size	Description	Approx. Weights	Attachments
No. 55	5-tooth—Equipped as shown in Illust. 1	81 lbs.	Beet Hoes
No. 75	7-tooth—Same as No. 55 except 7 teeth	87 lbs.	Depth Regulator
No. 95	9-tooth—Same as No. 55 except 9 teeth	99 lbs.	Long Potato Hillers
14-tooth	14-tooth with straight sides	64 lbs.	Pair Beet Hoes and Center Shovel





## McCormick-Deering Dixie Wonder Cultivator



*Illust. 1 — 7-Tooth Dixie Wonder with hand gang expansion. Also made in 5-tooth size. Hand levers can be furnished.*

The Dixie Wonder is a high-grade weeder and surface mulch cultivator, especially adaptable for cultivating corn, potatoes, tobacco, or other crops which are planted in rows. The spring teeth do an efficient job killing weeds. In stony ground where ordinary cultivators are thrown out of the ground, the teeth on the Dixie Wonder pass these obstructions and spring back into place without throwing the cultivator out of the soil.

The Dixie Wonder is made in two sizes, 5 and 7-tooth. It can also be furnished with hand gang adjustment, as shown above; or with lever gang adjustment, as shown below. The Dixie Wonder is an all-steel tool except for the oak handles. The beam is made of two sturdy angle-steel bars.

The teeth of this cultivator can be set in a straight line across the row to break the crust without moving too much dirt, and can also be set V-shaped to move the dirt towards the center of

the row, or reverse to move the dirt toward the crop row. The teeth can also be set in a diagonal line, either way, to throw all the dirt in one direction as for work on hillsides.

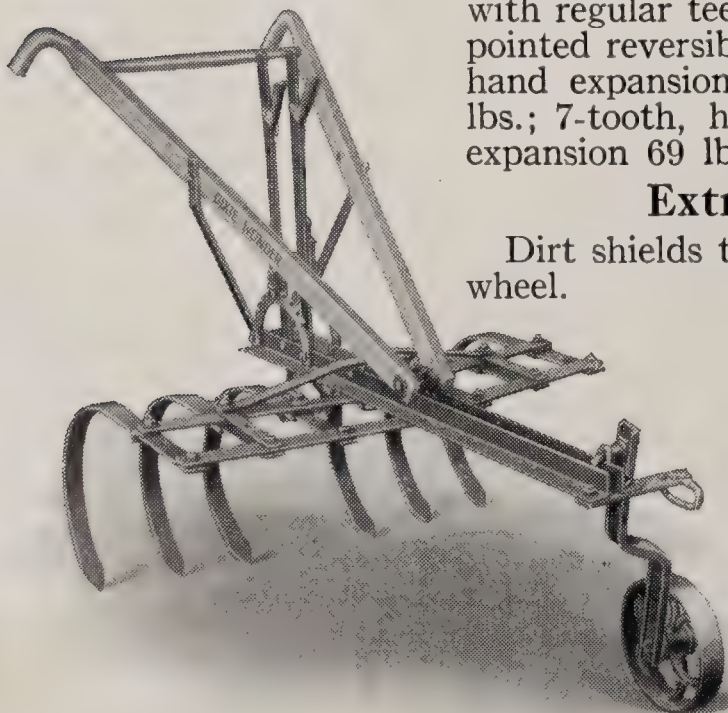
Where it is desired to straddle the row, the center tooth can be taken out and dirt shields, which are furnished as extra equipment, can be used to protect the plants. Where the lead wheel is used, the hitch and lead wheel can be offset to clear the row.

### Regular Equipment

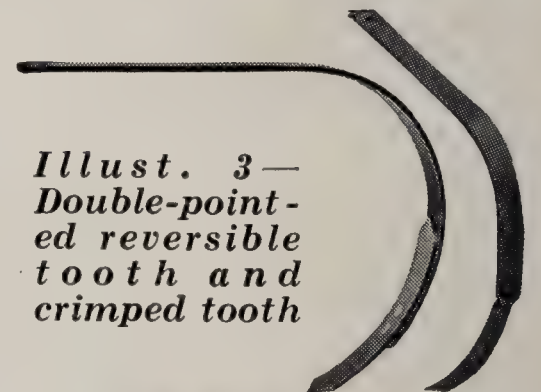
Five or 7-tooth, hand or lever expansion, with regular teeth, crimped teeth or double-pointed reversible teeth. Weights, 5-tooth, hand expansion 52 lbs., lever expansion 60 lbs.; 7-tooth, hand expansion 61 lbs., lever expansion 69 lbs.

### Extra Equipment

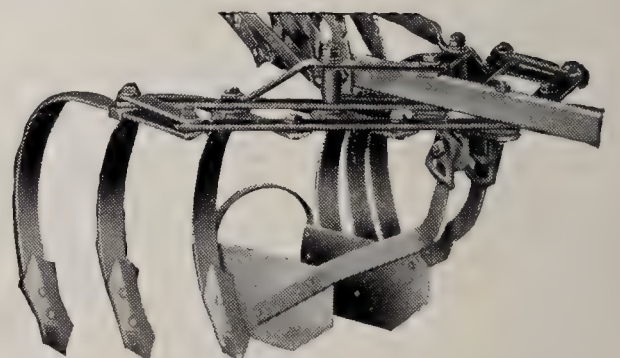
Dirt shields to protect plants; offset lead wheel.



*Illust. 2 — Dixie Wonder with expanding levers and lead wheel. Center tooth removed to straddle row.*



*Illust. 3 — Double-pointed reversible tooth and crimped tooth*



*Illust. 4 — Shows dirt shields which are furnished as extra equipment.*





## McCormick - Deering Soil Pulverizers

A combination roller, pulverizer,  
cultivator and packer

For horses or  
tractors



*Illust. 1—Nine-foot McCormick-Deering Soil Pulverizer.*

### More Than a Land Roller

The McCormick-Deering soil pulverizer is much more than a mere clod crusher. It packs loose soil, flattens out air spaces, reduces soil blowing, prevents winter killing, and cultivates wheat, alfalfa, or other crops. It can be used for many different tasks and is a machine that is becoming popular with farmers everywhere. It repays its cost in the seed it will save if used immediately after the grain drill or seeder.

### Quick Detachable Brackets

The quick detachable end brackets with which McCormick-Deering soil pulverizers are now equipped are a decided advantage. By removing a cotter at either end, the lower half of the bracket may be slipped off the axles. One or more of the wheels may then be removed from the gangs, the remaining wheels separated at any desired place and held apart by split axle collars.

### Combined Forecarriage and Tractor Hitch

The McCormick-Deering soil pulverizer is regularly equipped with a combined forecarriage and tractor hitch. When drawn by a tractor the forecarriage may be removed without disturbing the hitch in any way. The use of the forecarriage is always recommended with horses. If desired a long 12-foot pole may be substituted for the stub pole and

combined forecarriage and tractor hitch at a reduced price.

### Reversible Wood Bushings

Like McCormick-Deering disk harrows, the bushings of the McCormick-Deering soil pulverizer can be reversed as they wear. They are made of hardwood and will last a long time. The four bearings of the pulverizer are so made that they are as near oil tight and dust proof as it is possible to secure. Hard oilers are provided on each bearing.

### Weight is Equalized

Upon examination, it will be plain to anyone why the McCormick-Deering soil pulverizer puts the proper amount of weight on both front and rear wheels. It is tied below and above with a pivot hitch between which equalizes the weight over both gangs and makes each wheel do its share of the work.

### Regular Equipment

Stub pole and combined forecarriage and tractor hitch.

### Extra Equipment

Twelve-foot pole. Stub pole and tractor hitch, instead of combined forecarriage and tractor hitch, at a reduction in price. No. 201, extension gangs. Orchard attachment.

### Specifications—McCormick-Deering Soil Pulverizer

Size	Length Over all	Actual Rolling Capacity	Diam. of Wheels		Number of Wheels	Approx. Weight
			Front	Rear		
No. 50	86 inches	73 inches	15-inch	12-inch	37	908 lbs.
No. 52	98 inches	85 inches	15-inch	12-inch	43	1028 lbs.
No. 56	110 inches	97 inches	15-inch	12-inch	49	1155 lbs.

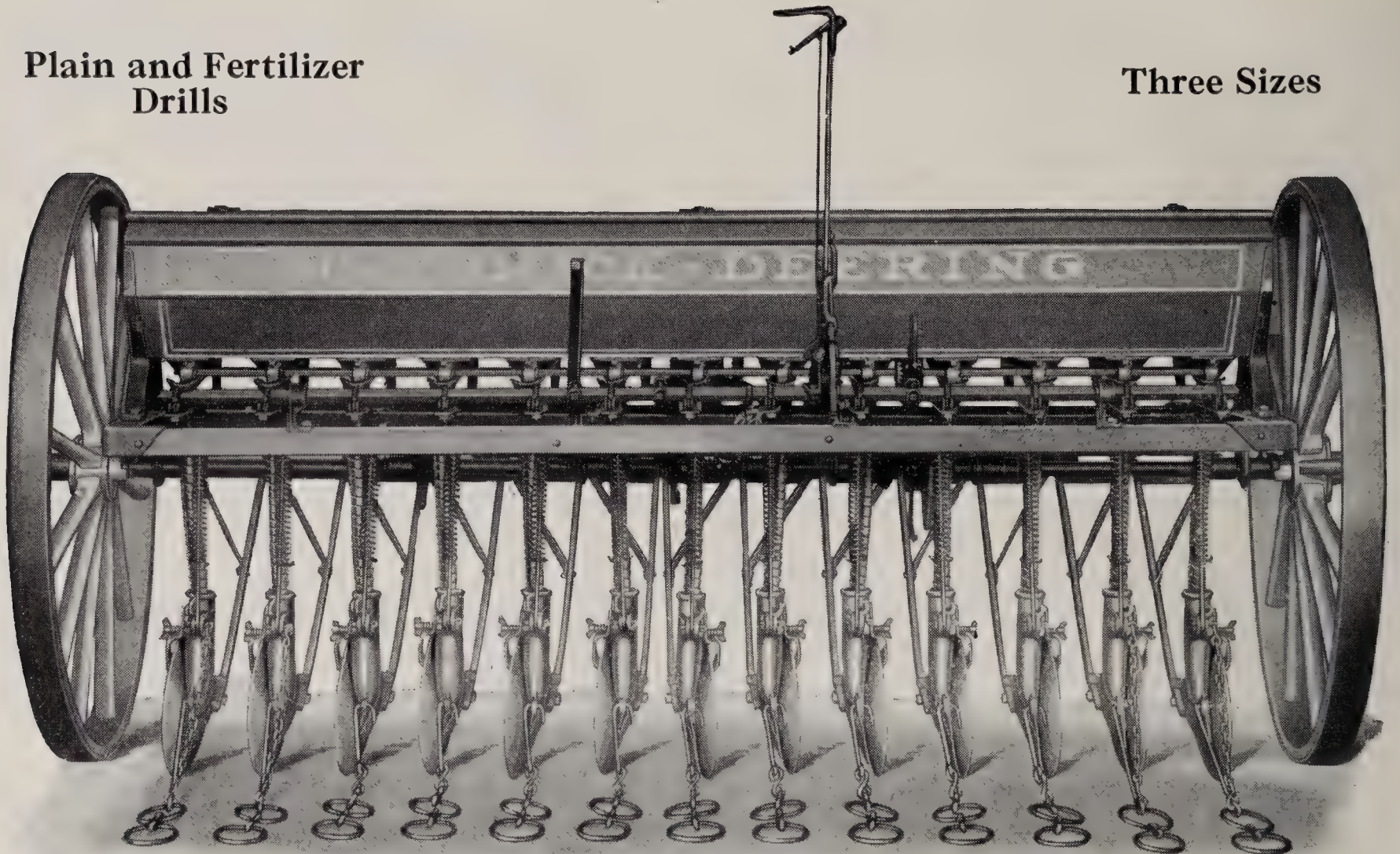




## McCormick-Deering Grain Drills

Plain and Fertilizer  
Drills

Three Sizes



*Illust. 1—McCormick-Deering Plain Grain Drill with 13 single disk furrow openers.*

### Accurate Internal Feed

The first requirement of a successful grain drill is that it must be accurate in seeding. Each furrow opener must receive exactly the same amount of seed at a given setting as every other one. This is accomplished on the McCormick-Deering drill by the use of the internal or double run feed. This type of feed which has been used for many years is the simplest and most accurate of all drill feeds. The feed openings are all the same size and never change. The quantity of grain fed into the furrow is regulated by the speed with which the feed rolls turn. A simple but accurate speed changing device, shown in illustration 7, governs the speed and provides sufficient speeds to enable the user to sow accurately all grains from flax to corn.

### Drill is Well Made

The construction of the McCormick-Deering drills is strong and durable to insure long life. Main frame is made of angle steel all the way around and securely cross braced to prevent twisting of the hopper and grain feeds. The wheels are strong, with long hubs, all of which helps keep the seeding mechanism in correct alignment on rough ground.

The grain hopper is exceptionally well made and is, we believe, the strongest box on any drill. It is so shaped as to afford the utmost strength without being heavy. It is braced against sagging and has a specially designed cover which opens without leaving a crack at the back. Accurate feed indicator is placed in plain view of the operator. Grass seed attachment is regular equipment.

### Specifications—McCormick-Deering Grain Drills

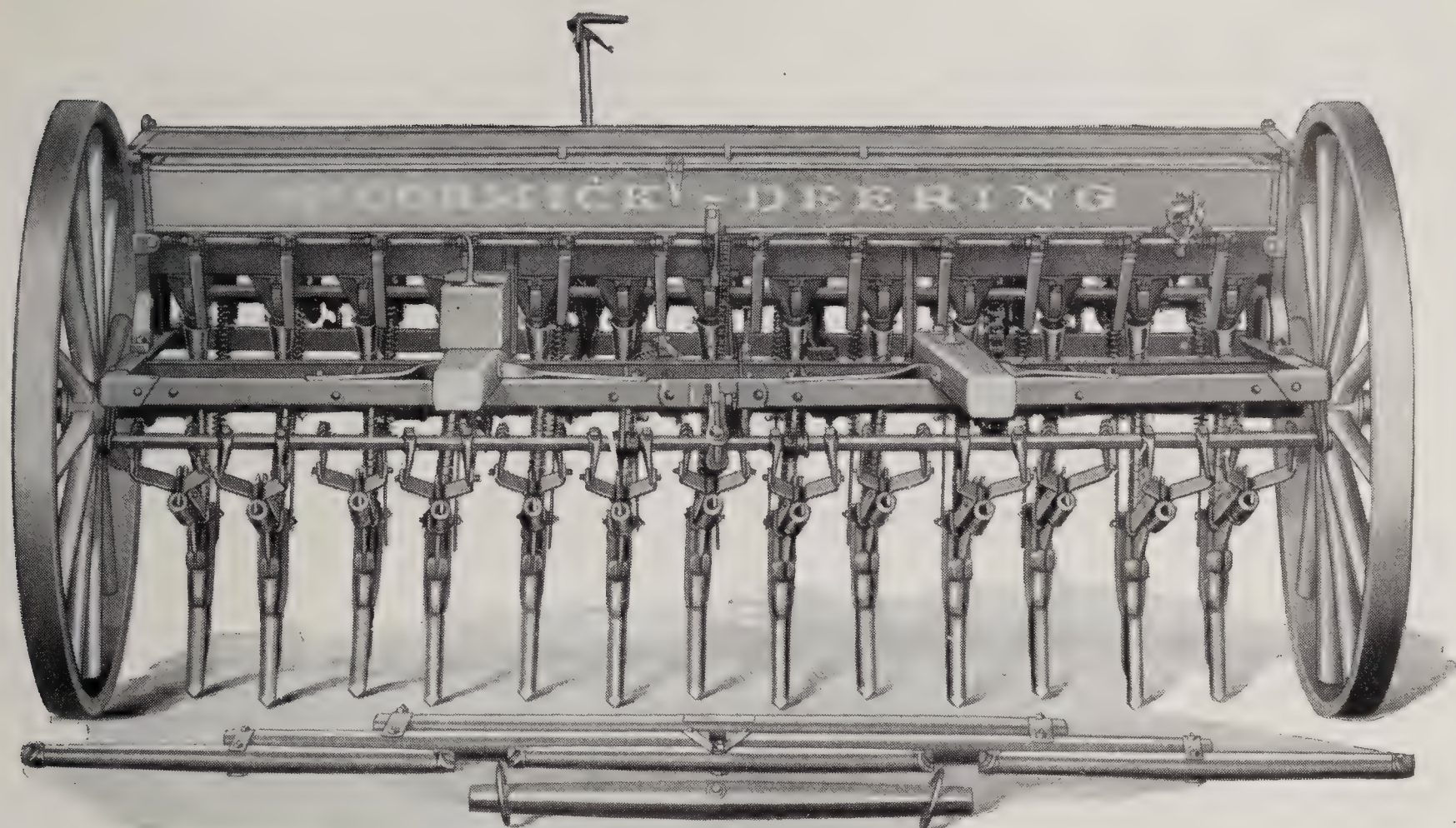
Size	Description	Wheels	Poles	Hitch	Approx. Weights
11-hoe	Plain 7" spacing	3"x48"	1	2 Horse	874 lbs.
13-hoe	Plain 7" spacing	3"x48"	2	2 or 3 Horse	1063 lbs.
11-hoe	Fert. 7" spacing	3"x48"	2	3 Horse	1102 lbs.
13-hoe	Fert. 7" spacing	3"x48"	2	3 Horse	1301 lbs.
11-disk	Plain 7" spacing	3"x48"	1	2 Horse	885 lbs.
13-disk	Plain 7" spacing	3"x48"	2	2 or 3 Horse	1063 lbs.
15-disk	Plain 7" spacing	3"x48"	2	3 Horse	1210 lbs.
11-disk	Fert. 7" spacing	3"x48"	2	3 Horse	1123 lbs.
13-disk	Fert. 7" spacing	3"x48"	2	3 Horse	1307 lbs.

Attachments: Footboards; grass seed attachments; spring teeth for hoe drills.



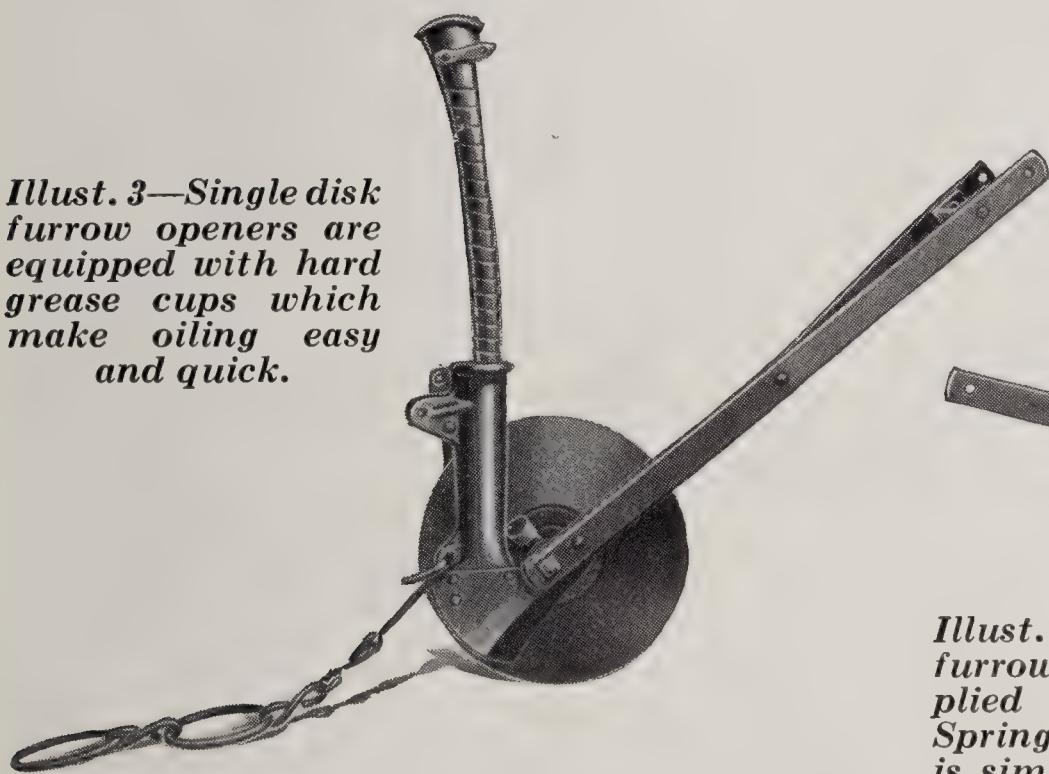


## McCormick-Deering Grain Drills



*Illust. 2—McCormick-Deering Plain Grain Drill equipped with 13 hoe furrow openers. Grass seed attachment is extra.*

*Illust. 3—Single disk furrow openers are equipped with hard grease cups which make oiling easy and quick.*

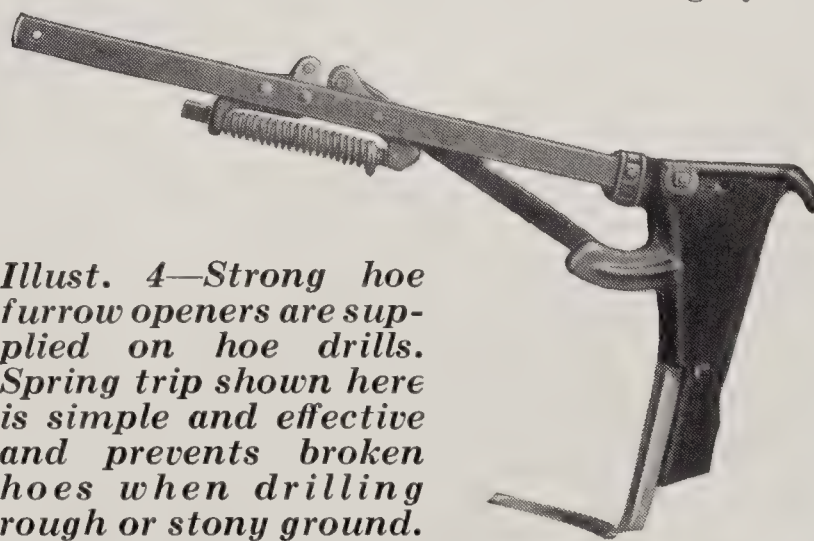


The type of furrow opener to use depends entirely upon the class of soil in the field. If it is loamy and free from stones the best opener is the single disk as shown here. The saucer shaped disk opens a clean furrow into which the seed is deposited. Covering chains then follow and smooth the dirt over the seed. Each disk is provided with a strong steel scraper which keeps the blade clean in gummy soil. Drag bar is double with a wide hitch which prevents

the opener from swinging sidewise. Adjustable pressure spring holds the disk to its work, but permits it to ride over roots or hard lumps.

For rough, stony ground a better job of drilling can be done if a hoe drill is used. The seed can be planted at more uniform depth because the hoe markers drag by the

*Illust. 4—Strong hoe furrow openers are supplied on hoe drills. Spring trip shown here is simple and effective and prevents broken hoes when drilling rough or stony ground.*



stones instead of being lifted up over them. Hoes are equipped with springs which allow them to spring backward and avoid injury if a really large stone is encountered. Spring teeth can be substituted for hoes on the same drag bars if it is desired to use the drill for broadcasting.

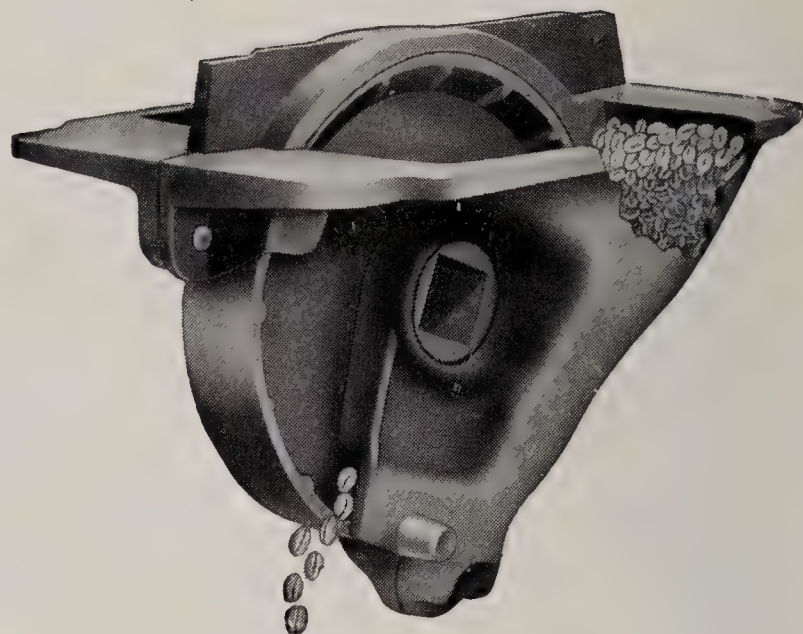




## McCormick-Deering Grain Drills



*Illust. 5 — Internal or double run feed cup showing large side of wheel which is used for planting oats, barley, corn, beans and such large seeds.*



*Illust. 6 — Feed cup showing small side of wheel used for sowing wheat, rye, flax, and other small seeds. A cap on each seed cup covers the side not in use.*

Speed changing device on McCormick-Deering drills is both simple and accurate. Speed of the feed rolls is changed by sliding the small pinion up or down on the square shaft and engaging it in any one of the several rows of teeth on the multiple disk. This increases or decreases the speed of the feed shaft and the feed wheels deliver more or less seed into the grain tubes. The device is very simple and the most accurate of all.

### Internal Feed

The internal or double run feed is really two distinct feeds in one. Each side of the feed wheel is adapted for certain kinds of seed. The large side is for corn, peas, beans, and other large brittle seeds. The small side is suitable for wheat, rye, flax, etc. Metal flappers cover the side of the cup not in use. Measurement, not weight, is the basis of sowing with the internal feed. Revolving wheel controls and measures the seed. Increasing or decreasing the speed of these wheels changes the quantity accordingly. Twenty changes of quantity for each side of the feed cup provide almost any desired quantity of any kind of seed sown with a grain drill.

### Handles All Seed

A feature of the double run, internal feed is that the owner can use his drill for planting all kinds of seed. After he is done with his wheat, he can turn the metal flappers to cover the small side of the feed wheels and use the drill for sowing peas, beans,



*Illust. 7 — Multiple feed disk and speed indicator which governs the speed with which the feed wheels revolve.*

or corn. This is not true of other types of drill feed as they have a tendency to crack the kernels of any large seed. When planting peas, beans, or corn, it is necessary only to stop up certain feed runs in order to secure the correct distances between the rows.





## McCormick-Deering Grain Drills



*Illust. 8—McCormick-Deering Fertilizer Grain Drill equipped with hoe furrow openers.*

### Not an Attachment

McCormick-Deering fertilizer drills are built as a complete unit with a combination grain and fertilizer hopper and can be had with 11 and 13 furrow openers. Almost all farms need some kind of fertilizer—some need one thing and some another—but whatever they need can be supplied by using a McCormick-Deering fertilizer drill.

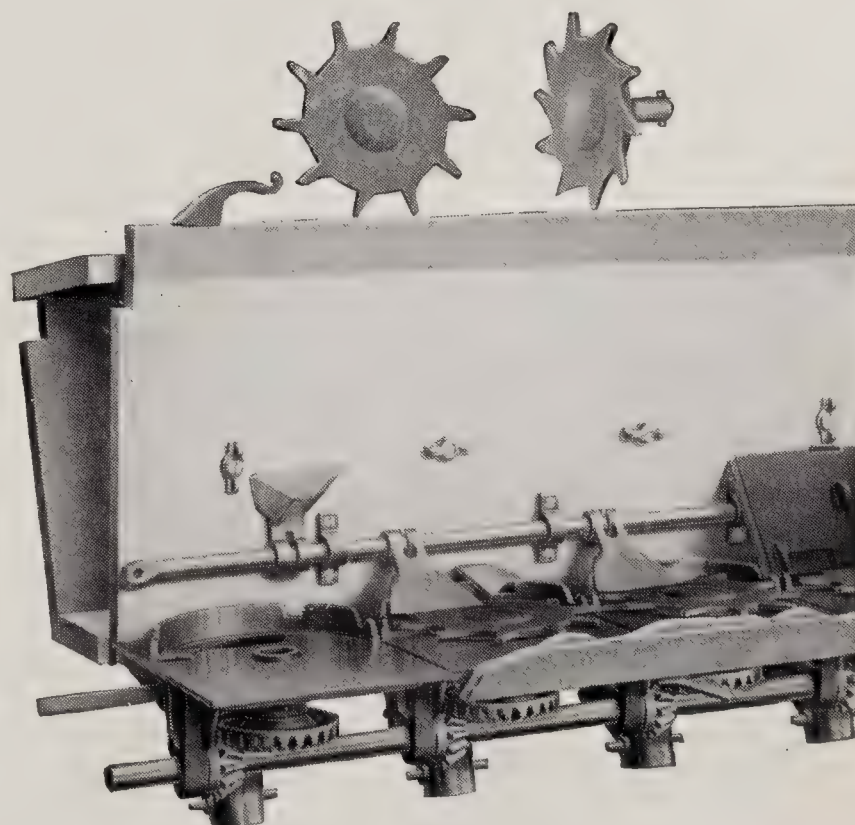
### Distributes All Kinds

Some commercial fertilizers are almost bone-dry. Others are moist and have a tendency to pack, while others are lumpy. A really successful fertilizer drill must be able to handle all of these accurately. McCormick-Deering fertilizer drills do this work and can be set to sow any quantities desired.

A complete feeding device is provided for each opener. (See illustration 9.) Revolving feeder wheels with thin fingers carry the fertilizer to the outlets which are specially shaped to produce a continuous flow of fertilizer to the furrow. Quantity can be regulated to suit.

McCormick and Deering fertilizer drills have been used in Eastern Canada for many years.

The men who use these high-class fertilizer drills are the first to recommend them to others.

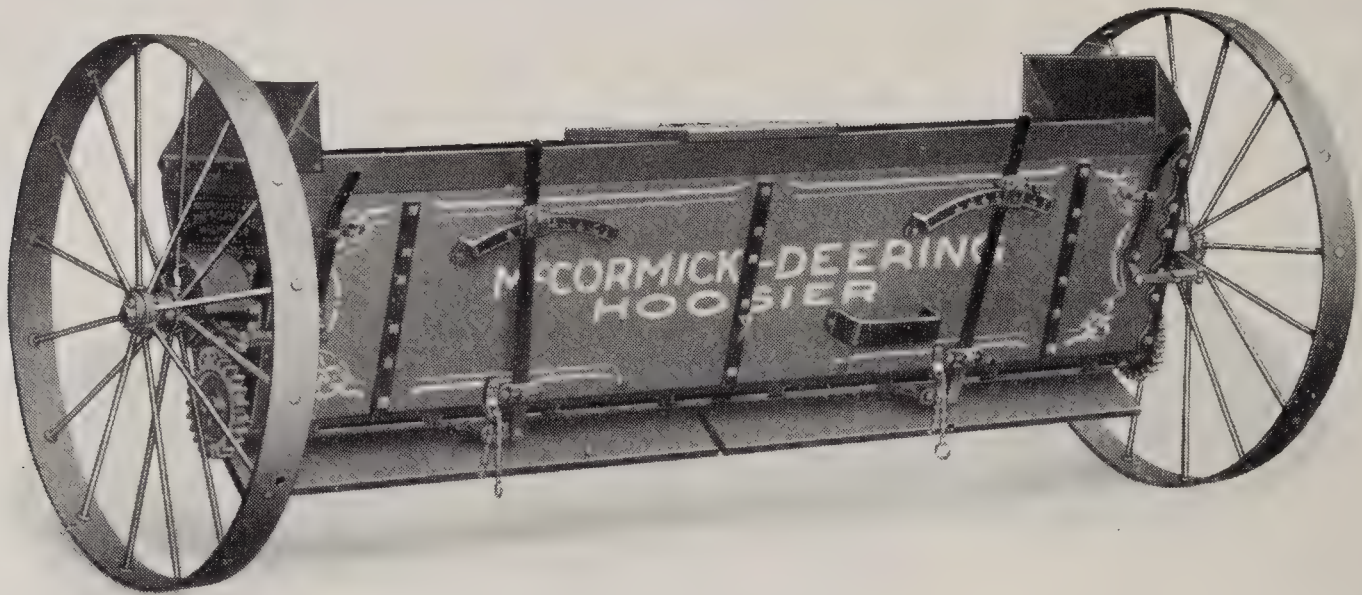


*Illust. 9—Sectional view of the inside of the fertilizer hopper. Fertilizer feed disks are shown in upper part of the picture. The fingers pull the fertilizer over a hole where it drops through the grain tube into the ground with grain.*





## McCormick-Deering Hoosier No. 3 Lime Sower



*Illust. 10—McCormick-Deering Hoosier No. 3 Lime Sower. Made in one size only—eight feet wide. Weight, fully equipped, 732 pounds. Traction lugs for the wheels may be supplied on special order.*

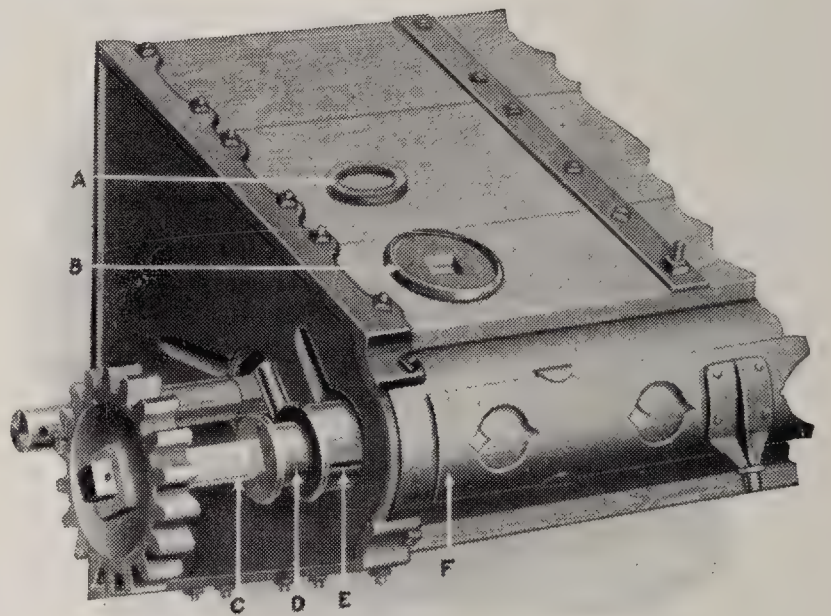
### Strong and Reliable

A big, strong and reliable implement for spreading lime on sour soils. It is the most practical machine of its kind because it broadcasts lime close to the ground where the wind has no chance to blow it away. Strongly bolted hopper has a capacity of 8 bushels and two additional bushels in the screen. Steel wheels are 44 inches high with 4-inch tread. Agitator feed is in two sections, driven from each end. An agitator located above the agitator feed prevents bridging.

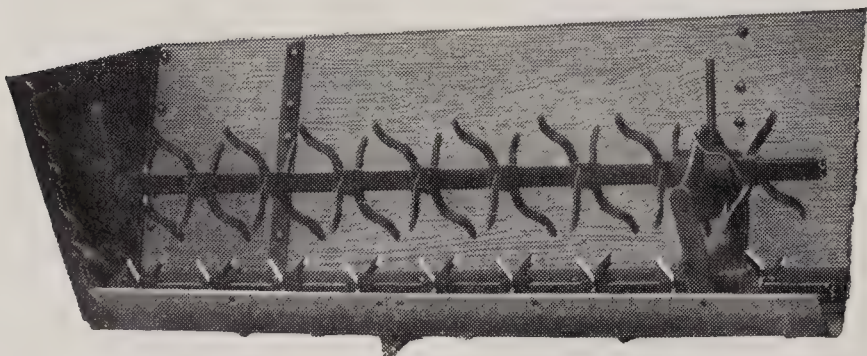
### Spreads Any Desired Quantity

By means of the various adjustments it is possible to spread from 42 to 3,435 quarts per acre of ground lime rock—137 to 3,200 quarts of hydrated lime. Easy to set feed for the desired quantity by changing lever stop. A wire screen is part of the regular equipment to keep large lumps from clogging the feed openings.

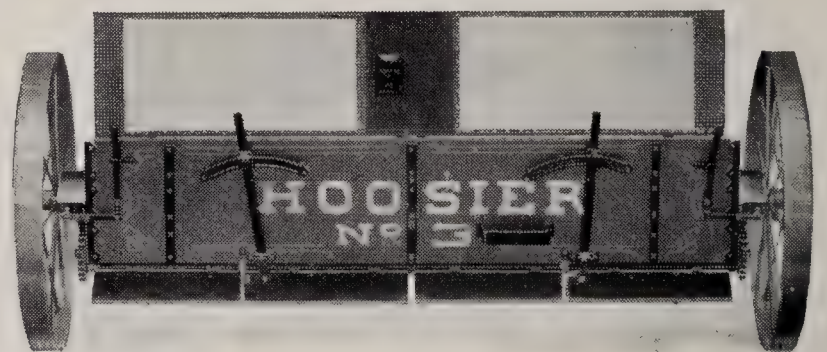
Gear shifting lever at each end permits spreading of half circuits.



*Illust. 12—Bottom of hopper. Feed openings set for small quantity. Note the removable axle bearings. Felt washer and dust cap are provided to prevent lime and grit from entering the journals.*



*Illust. 11—Interior view of hopper showing double agitator arrangement, including agitator feed in bottom of hopper, and the additional agitator in the middle of the hopper to prevent the lime bridging. The divided agitator shaft serves as a revolving axle for the machine.*



*Illust. 13—All materials broadcast with the No. 3 lime sower should be passed through hinged screen that is supplied regularly with all machines. This screen excludes chunks larger than  $\frac{1}{2}$ -inch and thus prevents breakage of feeder wheels or clogging of the feed openings.*

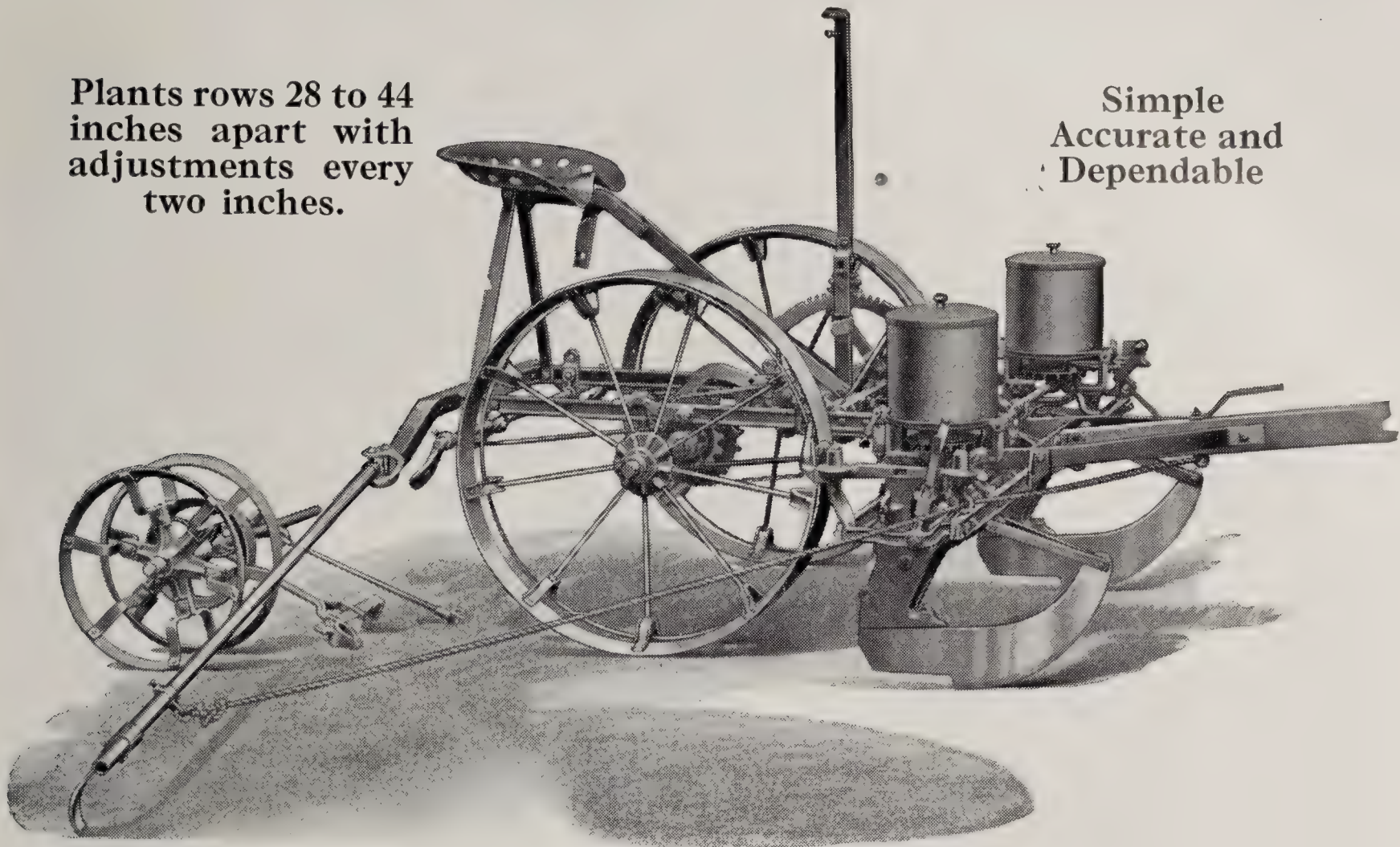




## McCormick-Deering Corn Planters

Plants rows 28 to 44 inches apart with adjustments every two inches.

Simple  
Accurate and  
Dependable



*Illust. 1—McCormick-Deering Planter showing automatic marker.*

### Three Planters in One

With the McCormick-Deering corn planter seed can be checked in hills evenly spaced both ways for cross cultivation; it can be drilled in rows, or automatically dropped in hills by means of the power drop. Any of these changes can be made in the field without delay and without buying expensive attachments.

### Variable Drop

When checking in hills the planter can be adjusted to drop 2, 3 or 4 kernels to the hill at any time without stopping the horses. The change from checking to drilling is made instantly by shifting a foot lever. Drilling distances are 7, 9, 10, 11, 12, 14, 15, 18 and 22 inches between kernels. An adjustment which can be made in one minute converts the machine into a power hill-drop drill for planting the seed in hills without check wire.

### Improved Hoppers

Flat and edge drop and full hill drop plates are interchangeable in the same hoppers. The owner can have and use all three types of plates if he so desires. Plates can be changed at any time without emptying the hoppers. Cut-off is so designed that it will operate efficiently on either type of plate.

### Positive Clutch

The McCormick-Deering clutch is built to last and operate positively as long as the planter lasts. Case-hardened roller bearings running on hard steel pins give light draft and practically never wear out. Bearings are extra long, not only to provide more

wearing surface but to make the clutch less sensitive to slight wear. The whole clutch is simple, accurate and durable.

### Improved Valves

An upper and lower valve in each boot, working together drop the seed accurately without stringing. While a hill is accumulating at the top, a full hill is resting in the lower valve an inch or two from the furrow. When the mechanism trips, the lower valve opens, forcibly ejecting the seed into the furrow while the upper valve opens dropping the next hill into the lower valve which has closed the boot, thus preventing any stringing of kernels in the row.

### Power-hill Drop

Especially in the bean and pea sections the power-hill drop feature will be appreciated. An adjustment requiring one minute will change the planter to a power drop drill.

Weight of McCormick-Deering Planter fully equipped is 530 pounds.

### Regular Equipment

Edge, flat or full hill drop plates as ordered.  
Check row, reel and eighty rods of wire.  
Regular runners. Automatic marker.  
Open rim wheels.

### Extra Equipment

Fertilizer attachment.  
Combined corn and pea hopper.  
Brush cut-off.  
Disk furrow openers.  
Special plates for peas, beans and other seeds.





## McCormick-Deering Corn Planters

### For All Seeds

The greatest advantage of the McCormick-Deering planter is that it can be adjusted for planting corn, beans, peas and other seeds. This adjustable feature makes it particularly valuable in Ontario and other provinces where corn is being raised in increasing quantities.

### Combination Hoppers

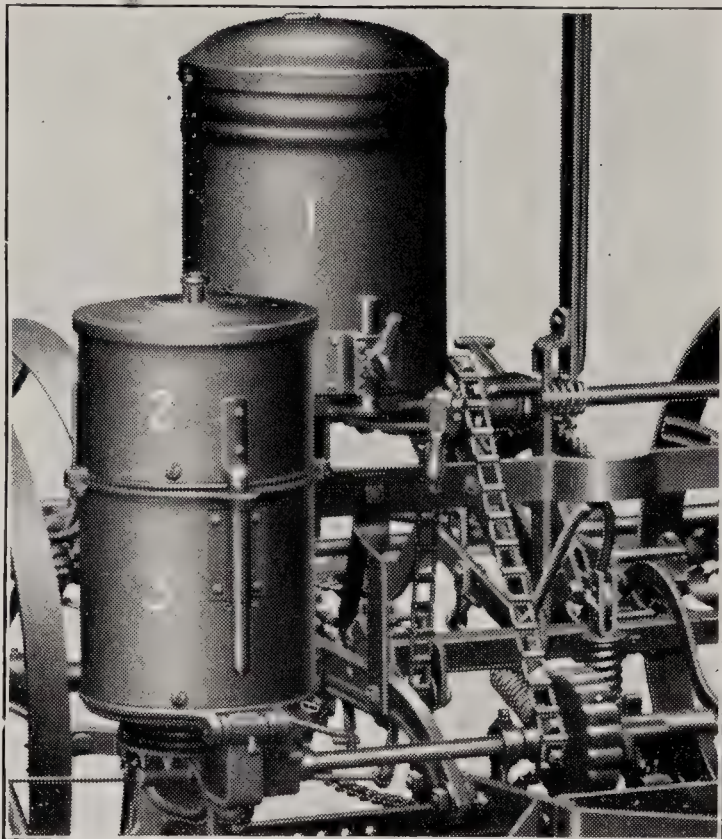
Many farmers wish to plant peas or beans in the corn rows. This can be done by using the combination hoppers shown in Illust. 2. The combination hopper (2) and (3) replaces the regular hopper. It is double-decked with the peas or beans in hopper (2) and corn in hopper (3). Peas or beans can be checked in the corn rows with the corn dropped alternately as desired. Does not interfere with fertilizer attachment.

### Fertilizer Attachment

Two large fertilizer hoppers (see (1), Illust. 2) distribute any kind of commercial fertilizer and will not clog. Hopper bottoms are smooth without cracks to catch the fertilizer. A simple device in the hopper can be adjusted to feed any desired quantity of fertilizer to the seed row, where it is delivered in two streams at either side of the row and not actually on the seeds.

### Easily Removed

The fertilizer hoppers can be quickly removed and set on the ground for refilling them, avoiding the necessity of lifting heavy bags of fertilizer. The attachment can be thrown into or out of gear at will, in case there are low portions of the field where fertilizer is not needed.

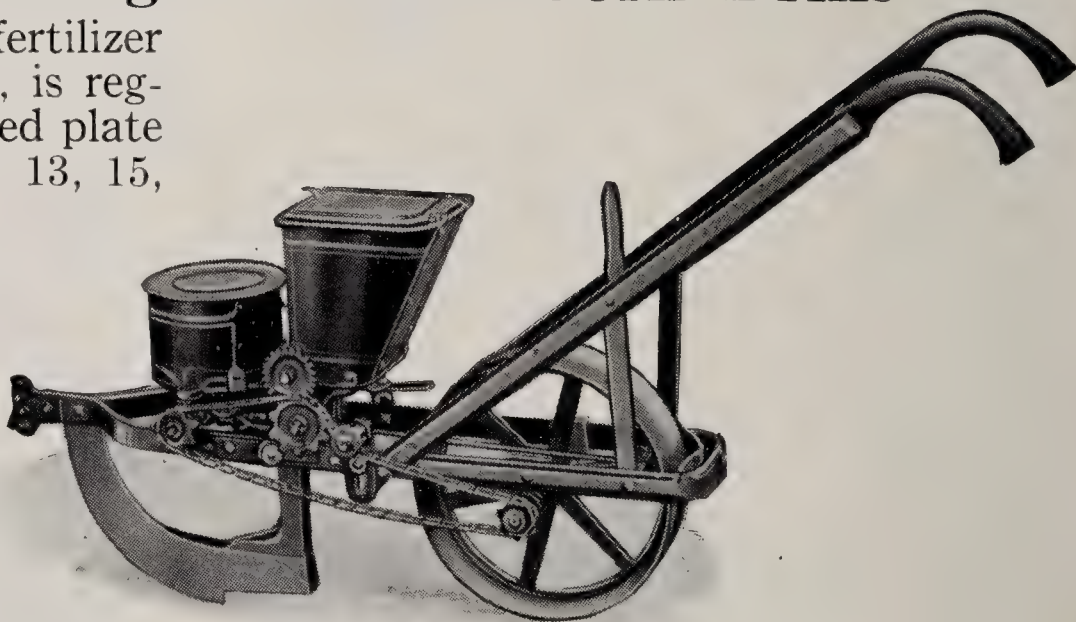


*Illust. 2—Showing fertilizer attachment (1) and combined corn and pea hopper (2) and (3). All three can be used at one time, if desired.*

## McCormick-Deering One-Row Corn Drills

McCormick-Deering one-row fertilizer corn drill, as shown at the right, is regularly equipped with a 10-hole seed plate for dropping single kernels 8, 11, 13, 15, 19, or 24 inches apart as desired. Shoe furrow opener makes a clean furrow into which the kernels drop. The wide-faced covering wheel then follows and presses the soil firmly over the seed. Long handles give the driver complete control over the planter.

This handy little one-row planter is regularly equipped with fertilizer hopper which sows the fertilizer in the corn row just back of the seed.



*Illust. 3—McCormick-Deering One-row Fertilizer Corn Drill as regularly equipped with shoe furrow opener and covering wheel.*

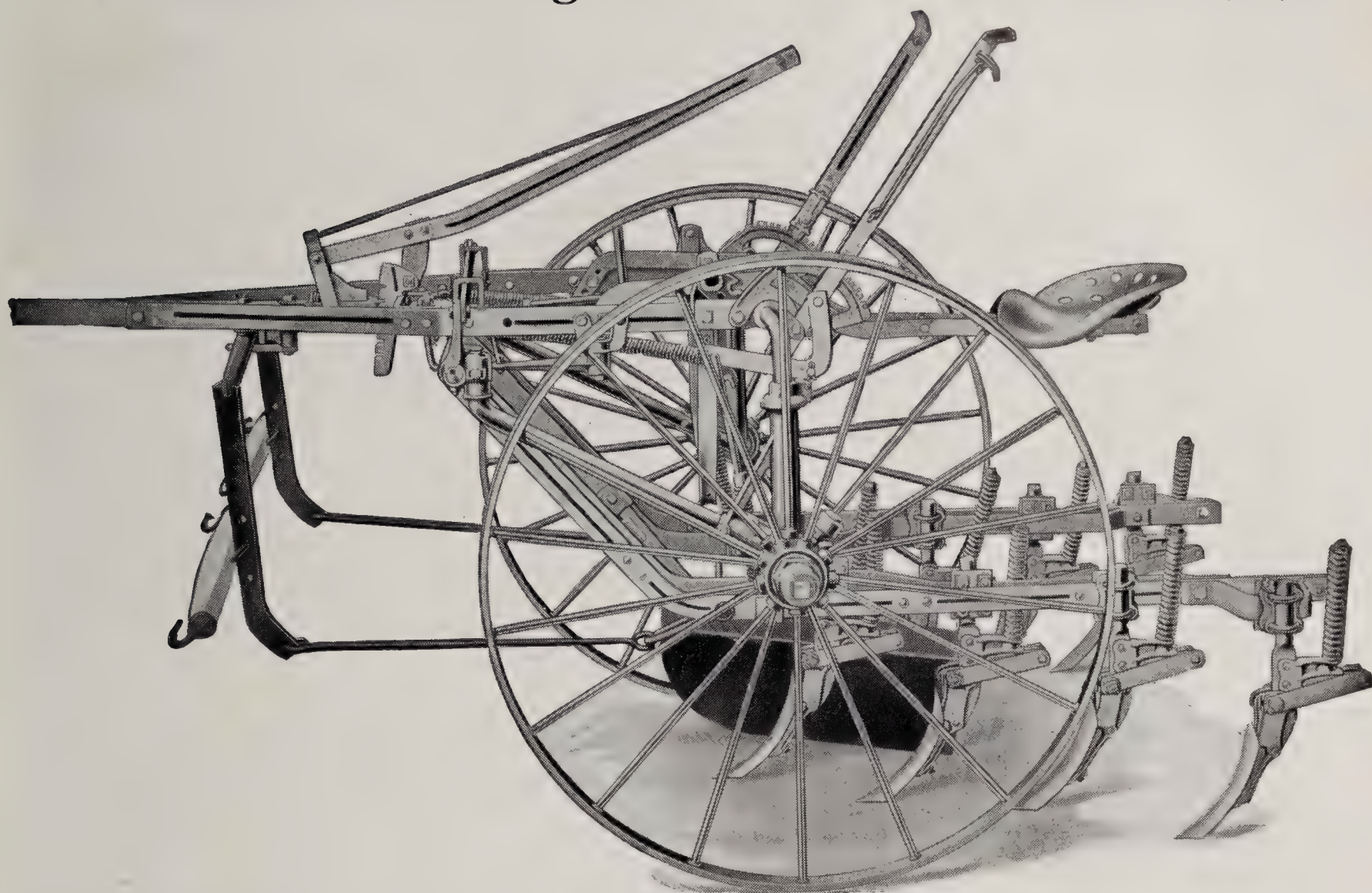
### Specifications—McCormick-Deering One-row Fertilizer Corn Drill

Description	Approx. Weight	
Fertilizer Shoe Drill with 10-hole plate Attachments: Pea Hopper	116 lbs.	





## McCormick-Deering No. 4 Pivot Axle Cultivator



*Illust. 1—McCormick-Deering No. 4 Pivot Axle Cultivator equipped with eight shovels, spring trip, round shank.*

### Pivot Axle Construction

Hill dodging is accomplished by means of two foot pedals placed just right for the driver's feet. An easy pressure on either pedal pivots the wheel axles, carrying the cultivator to the right or left as the case may be. At the same time the gangs shift sideways, keeping the shovels constantly parallel.

### Ball Bearing Pivots

Did you ever hear of a ball bearing cultivator? McCormick-Deering No. 4 is easy to operate because the whole weight of the cultivator and driver rests on hardened steel balls. In each of the axle pivots, supporting the frame, you will find large ball bearings such as are used in high-priced automobiles. That is the reason so many boys of twelve to sixteen are using McCormick-Deering No. 4 in preference to other cultivators.

### No Need for Pivot Lock

No. 4 cultivator can be hauled behind a wagon over holes, roots and bumps without shifting the wheels. This is due to the pivot axle combined with the shifting frame. The wheels cannot change from a straight position unless you actually push on the foot pedals. Thus after a full day's work the driver's legs are not so tired as they would be if he had to hold the wheels.

### Depth Lever on Tongue

For tall or short horses or to regulate deep or shallow cultivation a center lever is provided on the tongue which raises or lowers the front of the cultivator. With this lever the driver can set his shovels to do exactly the class of work he wants. Gangs are strongly constructed of parallel steel bars which bolt securely to the shifting frame. No ordinary field work will ever twist them.

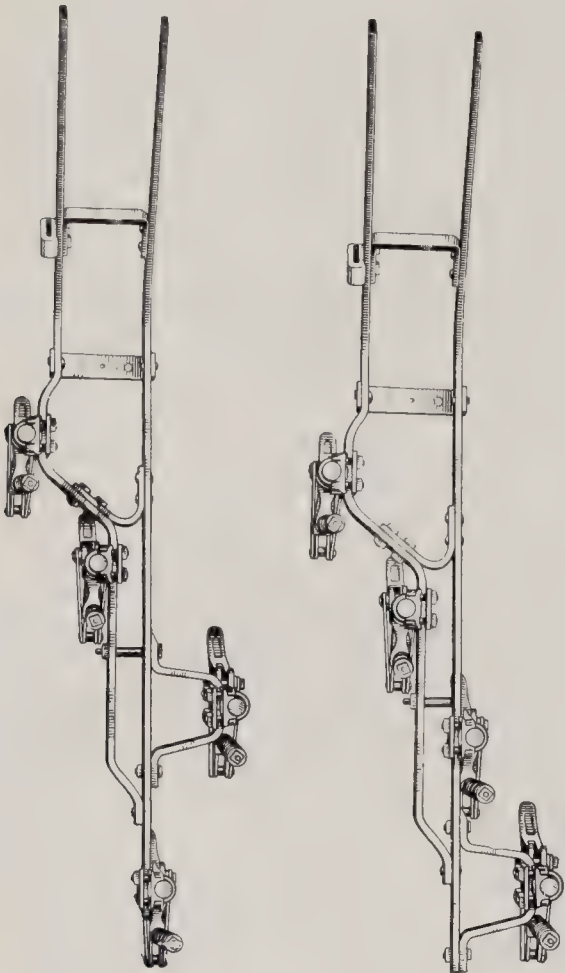
### Specifications—McCormick-Deering No. 4 Pivot Axle Cultivator

Size	Description	Approx. Weight	Attachments
8-Shovel 8-Shovel	Pin break gangs Spring trip gangs	467 lbs. 500 lbs.	Center Shovel—Thistle cutters Front Disks Bean harvester—Tobacco att.
Regularly equipped with two-horse hitch			

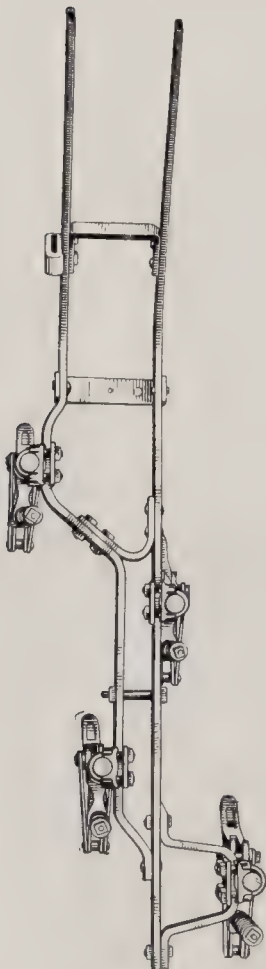




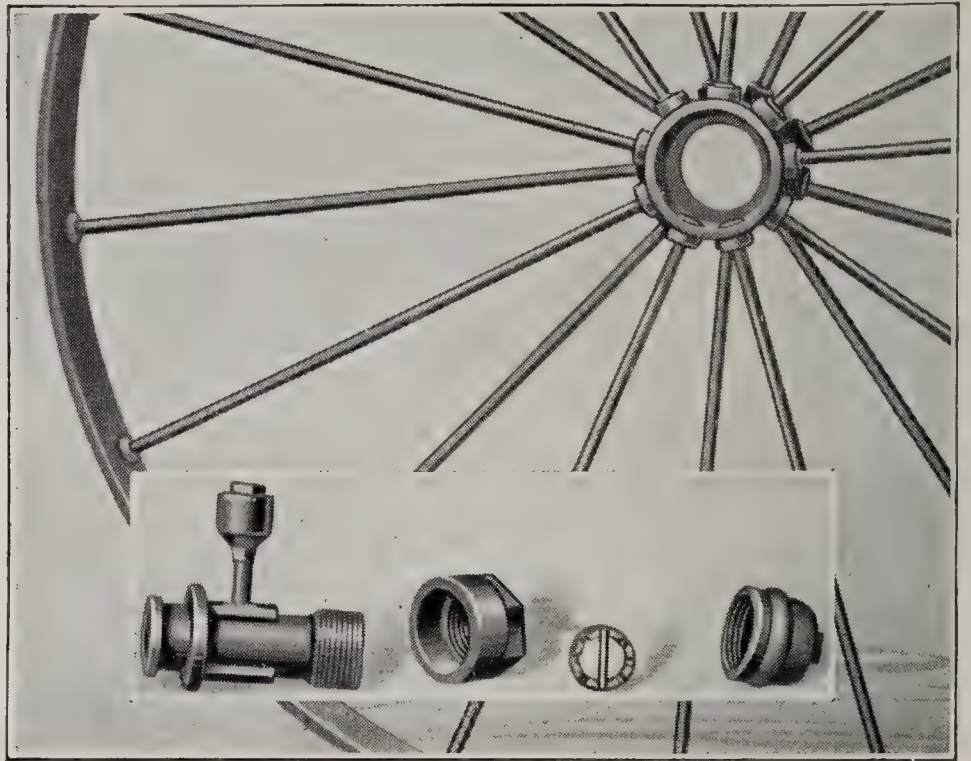
## McCormick-Deering No. 4 Pivot Axle Cultivator



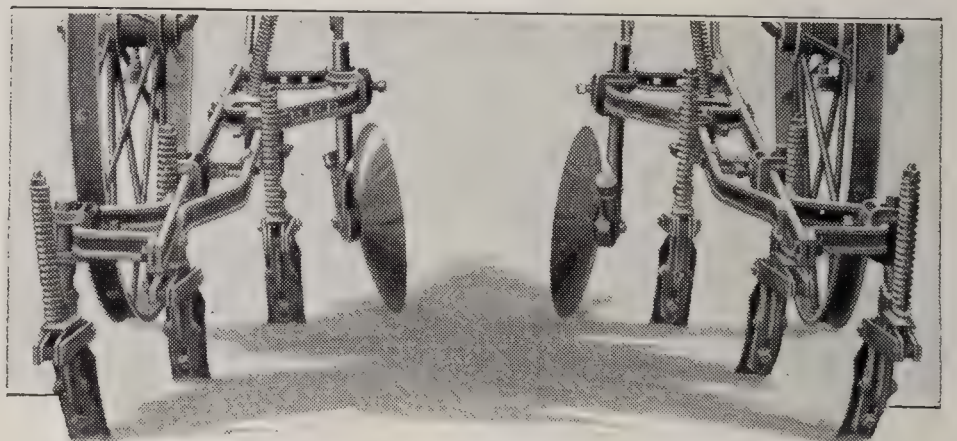
*Illust. 2 — Diagrams showing "Eagle Claw" and "Diagonal" shovel arrangements.*



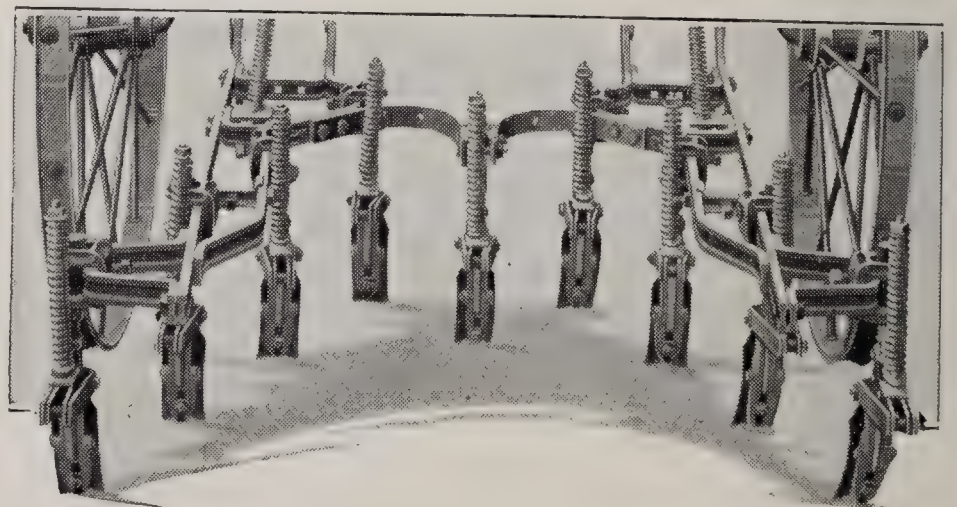
*Illust. 5 — Diagram showing "Zigzag" arrangement of shovels which gives more clearance.*



*Illust. 3—Strongest wheels ever placed on a cultivator. Widely staggered spokes are set into a long hub which is proof against side hill work and end thrust. Hub bushing is replaceable. Hard oiler insures ample lubrication.*



*Illust. 4—Disk hillers can be ordered extra and substituted for front shovels. May be set to throw dirt to or from the plants.*



*Illust. 6—Center shovel can be supplied on special order to bolt between the gangs. When so equipped the cultivator can be used for the same purposes as a spring-tooth harrow.*





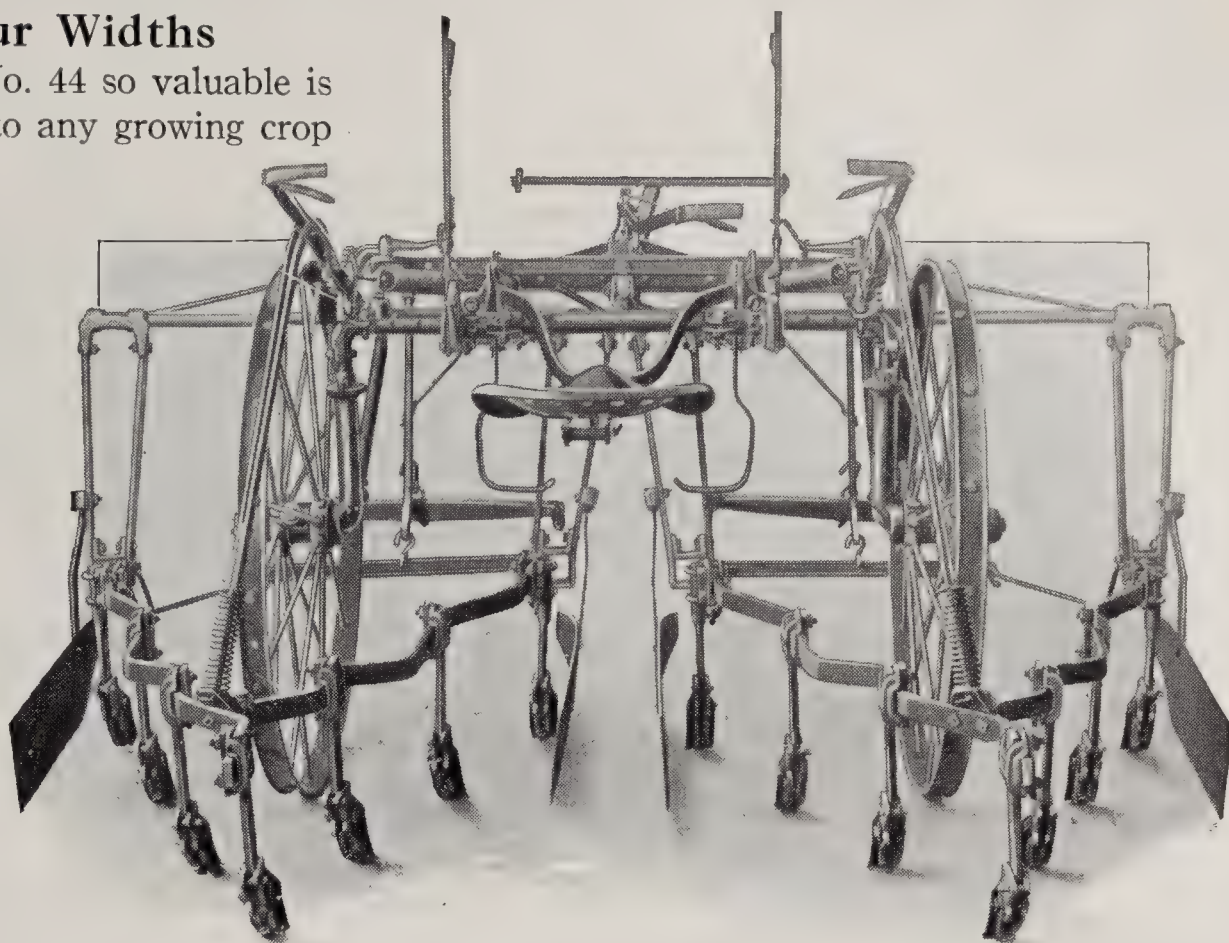
## McCormick-Deering No. 44 Two-Row Finisher

### Adjustable to Four Widths

One thing that makes the No. 44 so valuable is the fact that it can be fitted to any growing crop that needs cultivation. It is only a few minutes' job to change the width of wheel tread from 45 inches to 40, 36, 32 or 28 inches, measured from center to center on the wheels. This can be done by telescoping the axle arch. Width of cultivation can be changed instantly by a lever placed within easy reach.

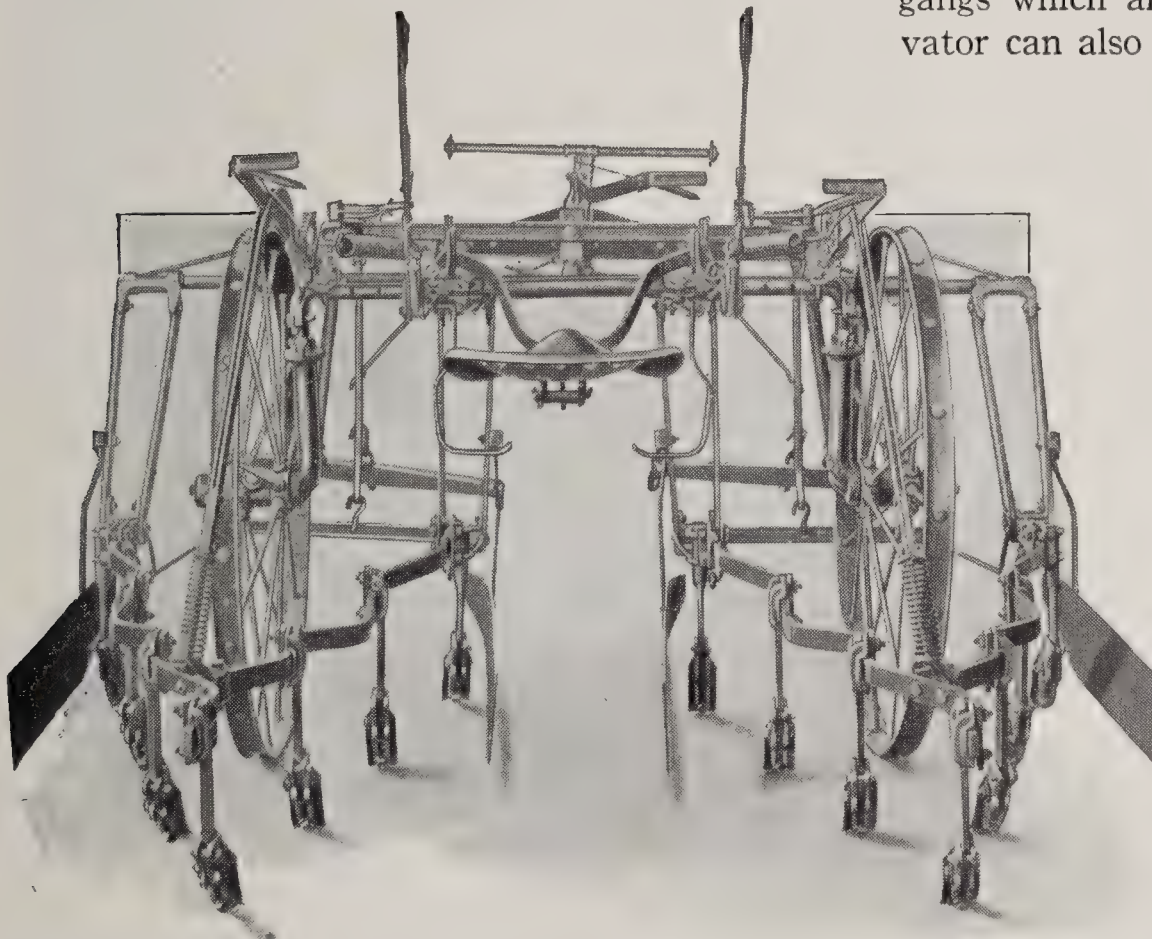
### Regular and Special Equipment

McCormick - Deering No. 44 two-row finisher is regularly equipped with two-horse hitch, but when conditions are extra hard or it is desired to cultivate very deep, a special four-horse hitch can be supplied at extra cost when so ordered.



*Illust. 7—McCormick-Deering Two-row Finisher with gangs extended for cultivating young crops. When gangs are set in this manner weeds can be cut off close to the rows.*

The center shovel, disk hillers and spring-trip gangs which are illustrated for No. 4 corn cultivator can also be supplied on order for No. 44.



*Illust. 8—McCormick-Deering Two-row Finisher with gangs set for late cultivation.*

### Strong Construction All Through

The frame, wheels, and general construction of McCormick-Deering No. 44 two-row finisher are exactly the same as No. 4. The difference is that the gangs extend on both sides of the wheels and cultivate a total of two rows each time across the field. The work of operating this cultivator is no more difficult than a one-row cultivator and twice as much ground is covered. When the crop is planted in fairly straight rows, the operator can cut the weeds close to the rows without uprooting the plants.

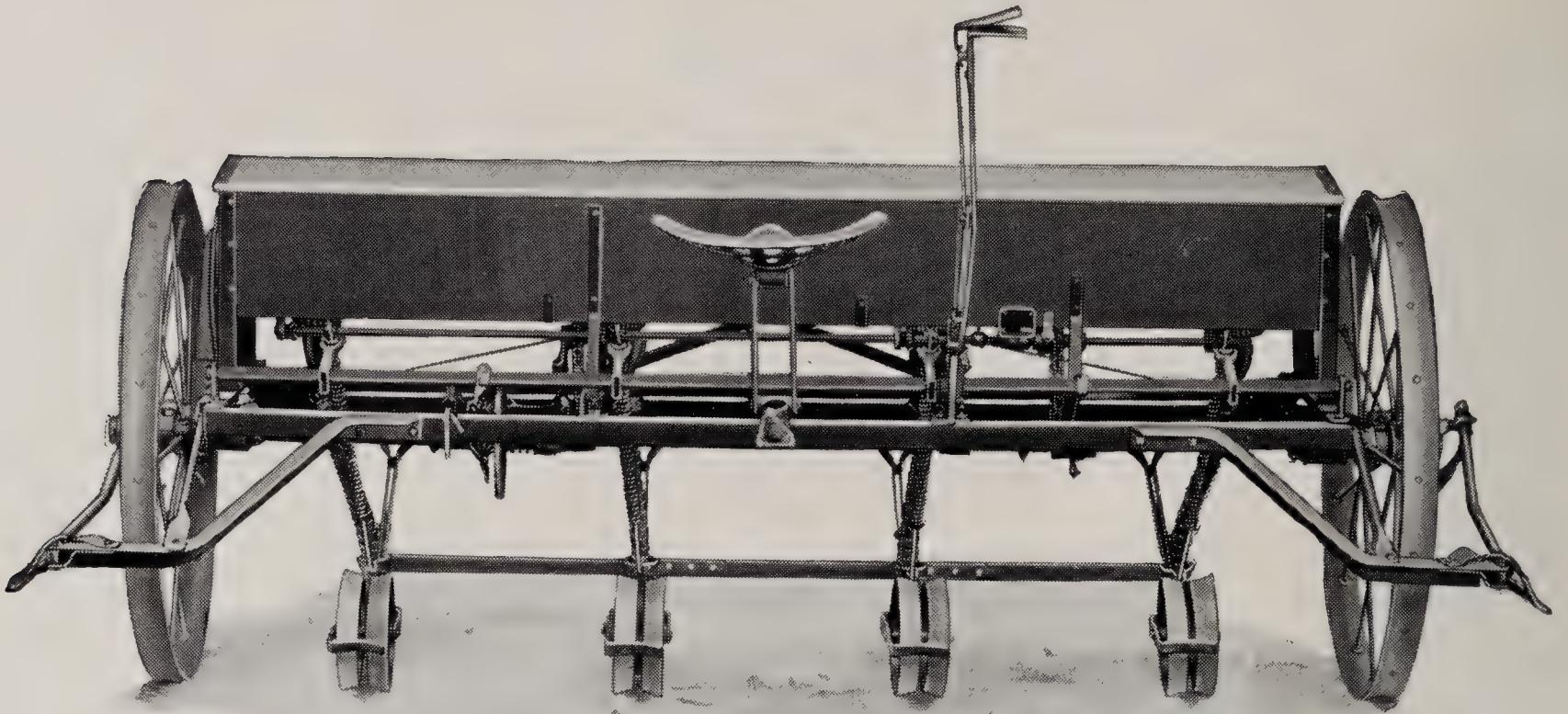
### Specifications—McCormick-Deering No. 44 Two-row Finisher

Size	Description	Approx. Weight	Attachments
14-Shovel 14-Shovel	Pin Break Gangs Spring Trip Gangs	625 lbs. 679 lbs.	Center Shovel Front Disks Regularly equipped with two-horse hitch Thistle Cutters





## McCormick-Deering Fertilizer Beet Drill



*Illust. 1—McCormick-Deering Four-row Fertilizer Beet Drill.*

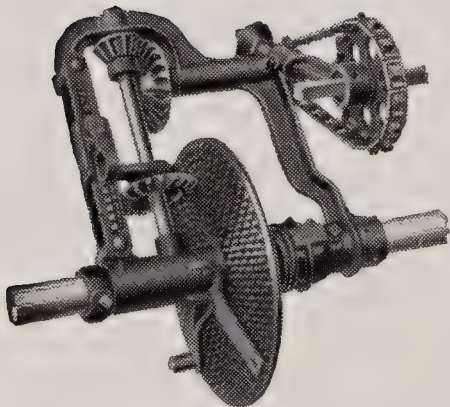
### Adjustable For All Conditions

The McCormick-Deering Fertilizer Beet Drill meets the requirements of farmers who wish to sow fertilizer with the seed. It will plant beet seed in rows 22, 24, 26, or 28 in. apart. The quantity of beet seed planted can be regulated from 9 lbs. to 24½ lbs. to the acre in 28-in. rows; 10½ lbs. to 26 lbs. in 22-in. rows, and in like proportions for 24 and 26-in. rows. The seed mechanism is of the internal double-run type as used on the seeding machines shown and described elsewhere in this catalog.

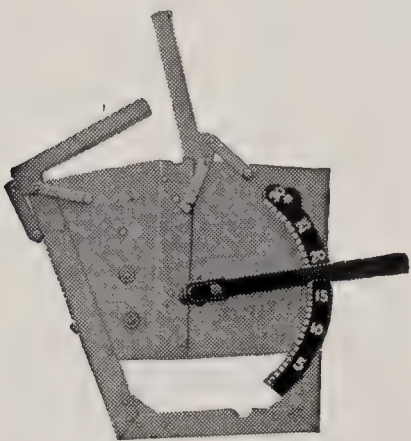
The fertilizer feed can be set to sow from 50 to 335 lbs. of the common commercial fertilizers to the acre in 28-in. rows; 65 to 425 lbs. in 22-in. rows, and proportionately for 24 and 26-in. rows.

The seed and fertilizer compartments of the hopper are of good capacity. The seed compartment is in front. Each compartment has its own lid. Both lids hinge at the front and fertilizer cannot get into the seed hopper when filling the fertilizer compartment.

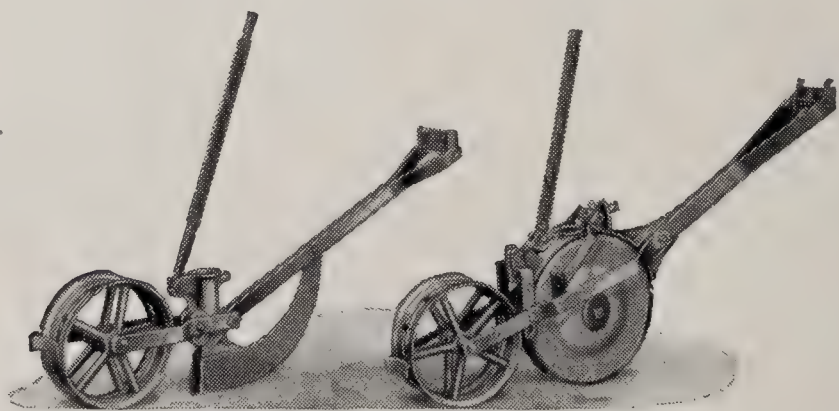
The press wheels insure proper covering, and compress the soil to insure early and uniform germination. Either the beet feed or the fertilizer feed can be operated independently of the other if desired.



*Illust. 2—Speed changing device for regulating the amount of seed.*



*Illust. 3—Double hopper with double lids for beet seed and fertilizer. Quantity lever is placed conveniently.*



*Illust. 4—Regular and double disk openers equipped with press wheels.*

**Regular Equipment:** Steel wheels; evener and neckyoke, automatic markers; press wheels.

**Attachments:** Double disk openers.

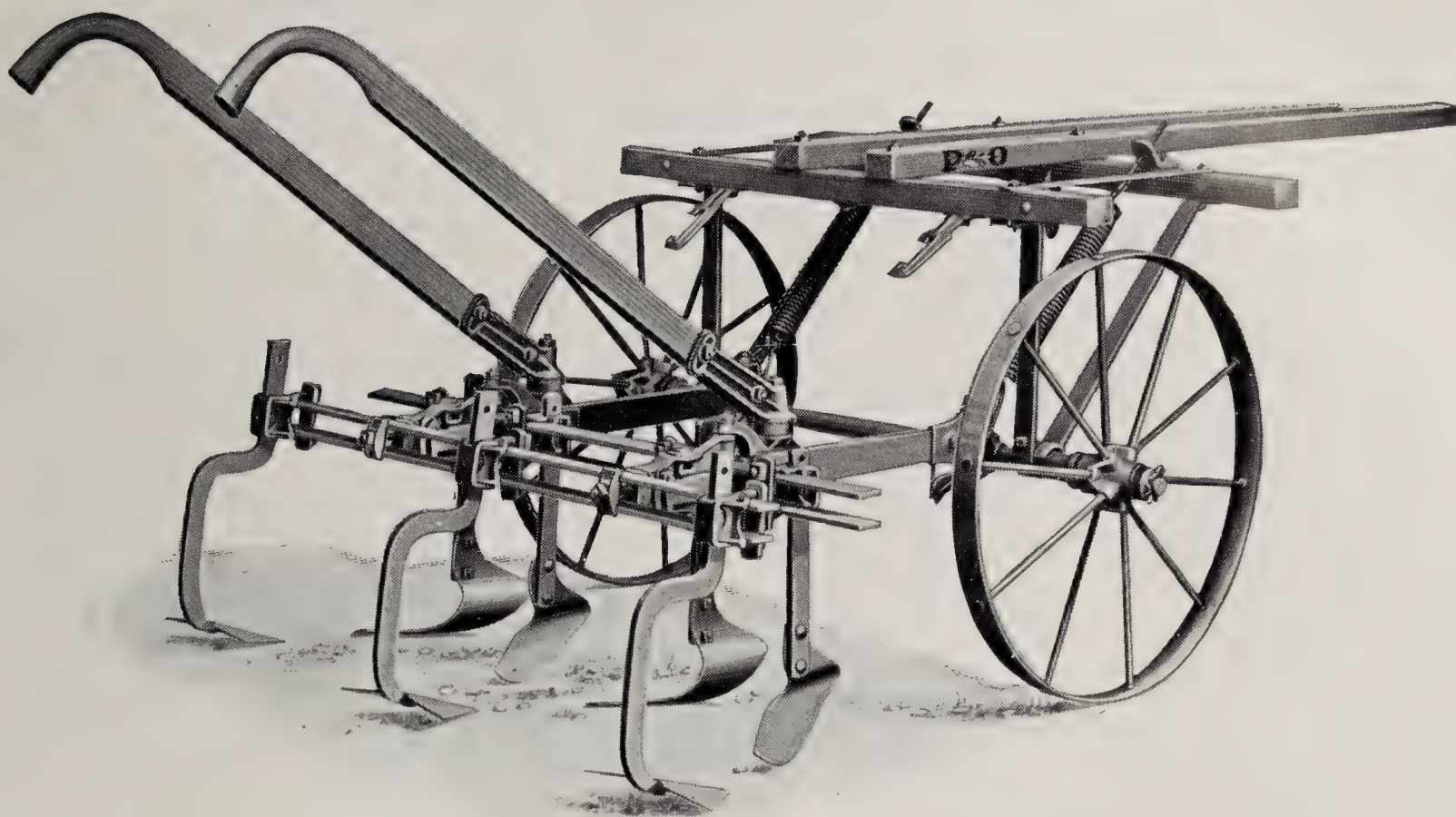
### Specifications—McCormick-Deering Beet Drills

Size	Description	Hitch	Approx. Weight
No. 7	Four-row, fertilizer	Two-horse	835 lbs.





## McCormick-Deering Beet Cultivator



*Illust. 1—McCormick-Deering No. 10 Two-row Beet Cultivator with knife weeder and duck foot attachments.*

### All Necessary Adjustments

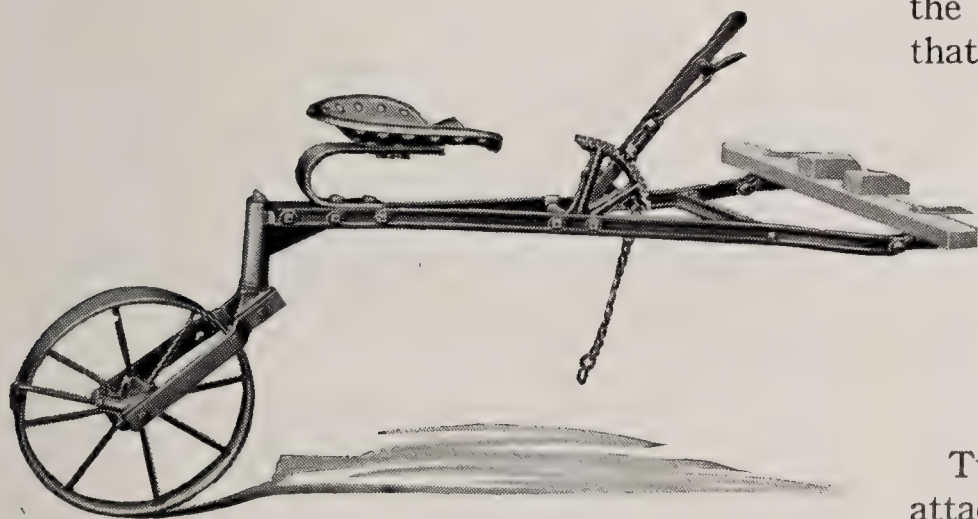
The No. 10 cultivator has two pairs of parallel cross bars, providing ample space for any number of attachments at varying widths. The adjustment of each pair is independent, making it possible to change the angle or pitch of all the attachments on the rear bars without disturbing the adjustment of those on the front bars, or the front bars may be changed without disturbing the rear bars.

### Well Built for Strength

All attachments are adjustable on the cross bars to cultivate between rows 18, 20, 22, 24, 26 or 28-in. apart.

The No. 10 beet cultivator can be equipped at extra cost with a seat attachment, which includes the seat rails, rear wheel and lever.

The wheels are 26-in. in diameter, with 2-in. tires, and with staggered spokes. They are adjustable in and out for different widths of rows. The cultivator is furnished with a pair of shafts for one horse. By setting them close together, and using the extension, a two-piece tongue is obtained so that two horses can be used if desired.



*Illust. 2—Riding attachment can be supplied at extra cost.*

### Regular Equipment

Combination shafts and tongue  
Singletree  
Seven Clamps  
Handle

### Extra Equipment

Two horse eveners and neckyoke; No. 1 riding attachment. Duck foot shovels; knife or disk weeder; irrigating shovels and many special types of shovels, as shown in Illustration 5.

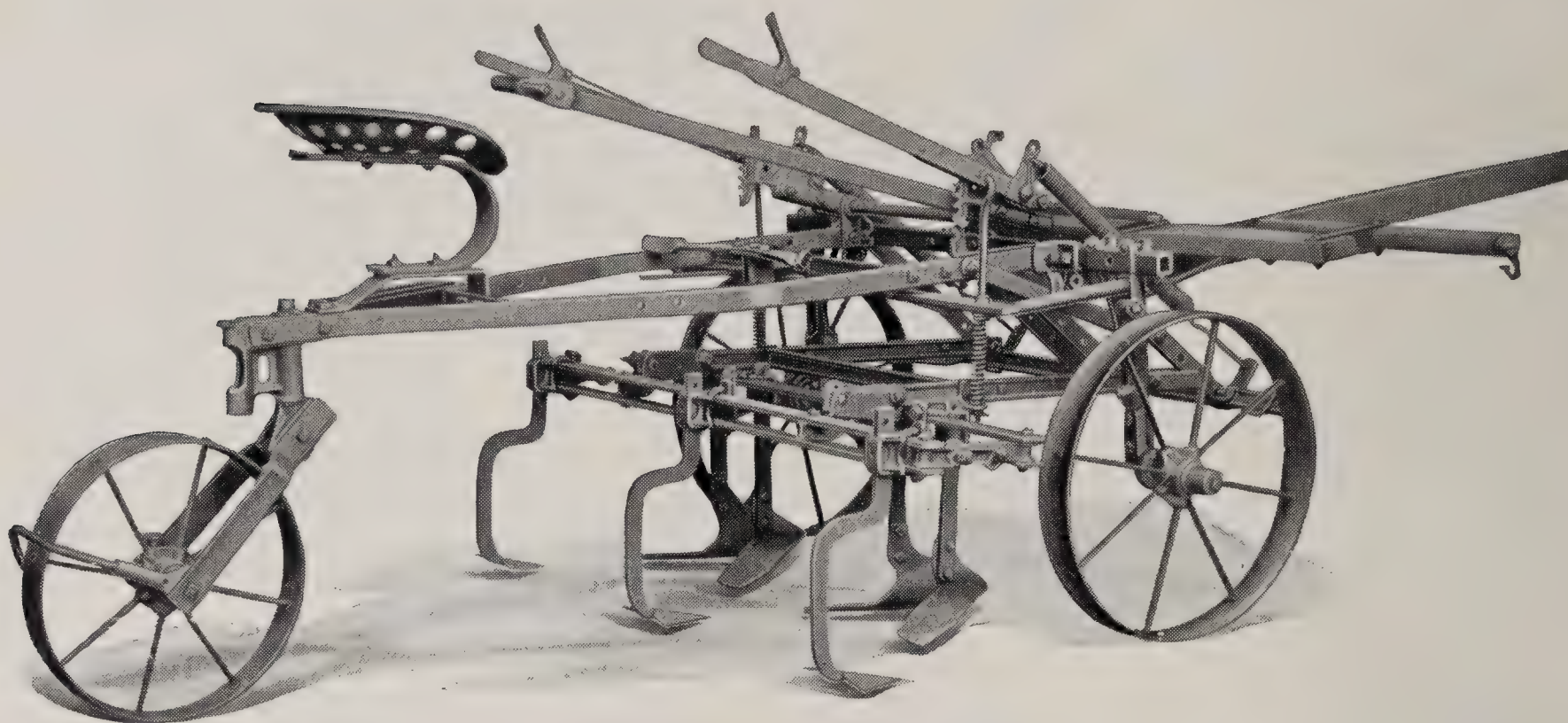
### Specifications—McCormick-Deering Beet Cultivator

Size	Description	Approximate Weight
No. 10	Two-row beet cultivator Riding attachment	217 lbs. 111 lbs.





## McCormick-Deering Beet Cultivators



*Illust. 3—McCormick-Deering No. 3-A Two-row Beet Cultivator with knife weeders and duck feet.*

### A Riding Cultivator

The McCormick-Deering No. 3-A beet cultivator is adjustable for 22, 24, 26, and 28-in. rows. The gangs have the double cross-bar construction, which gives more clearance for appliances and permits arranging them in any desired combination or spacing.

By means of foot levers, so placed that the feet of the operator rest in the stirrups naturally, the wheels may be pivoted either way, carrying the shovels and weeders toward or away from the plants, insuring close cultivation and at the same time providing a quick and efficient means of dodging when there is danger of cutting the plants.

The main lever raises and lowers the gangs as a unit at the ends of the rows. The gang is suspended from two points, and the rock shaft, extending across the frame, causes both sides to rise squarely. Auxiliary levers enable the operator to adjust either side independently when working in uneven ground.

### Strong, Durable Wheels

The front wheels are 23-in. and the rear wheels 18-in. in diameter. All three wheels have 3-in. tires. They are equipped with dust-proof boxes and compression grease cups for using hard oil.

The seat is adjustable backward or forward on the seat spring to accommodate a tall or short driver in readily operating the foot levers. The rear axle bracket is provided with a socket for an umbrella.

Cushion springs between the levers and the gang give the gang a yielding pressure, adapting it to ordinary irregularities in the ground. Strong balance springs assist the operator in raising the gang.

### Regular Equipment

Two-horse evener and neckyoke.  
Eleven clamps.  
Comfortable seat.

### Extra Equipment

Knife or disk weeders, duck feet and other special shovels. (See Illustration 5.)  
No. 29 sheet iron shields.

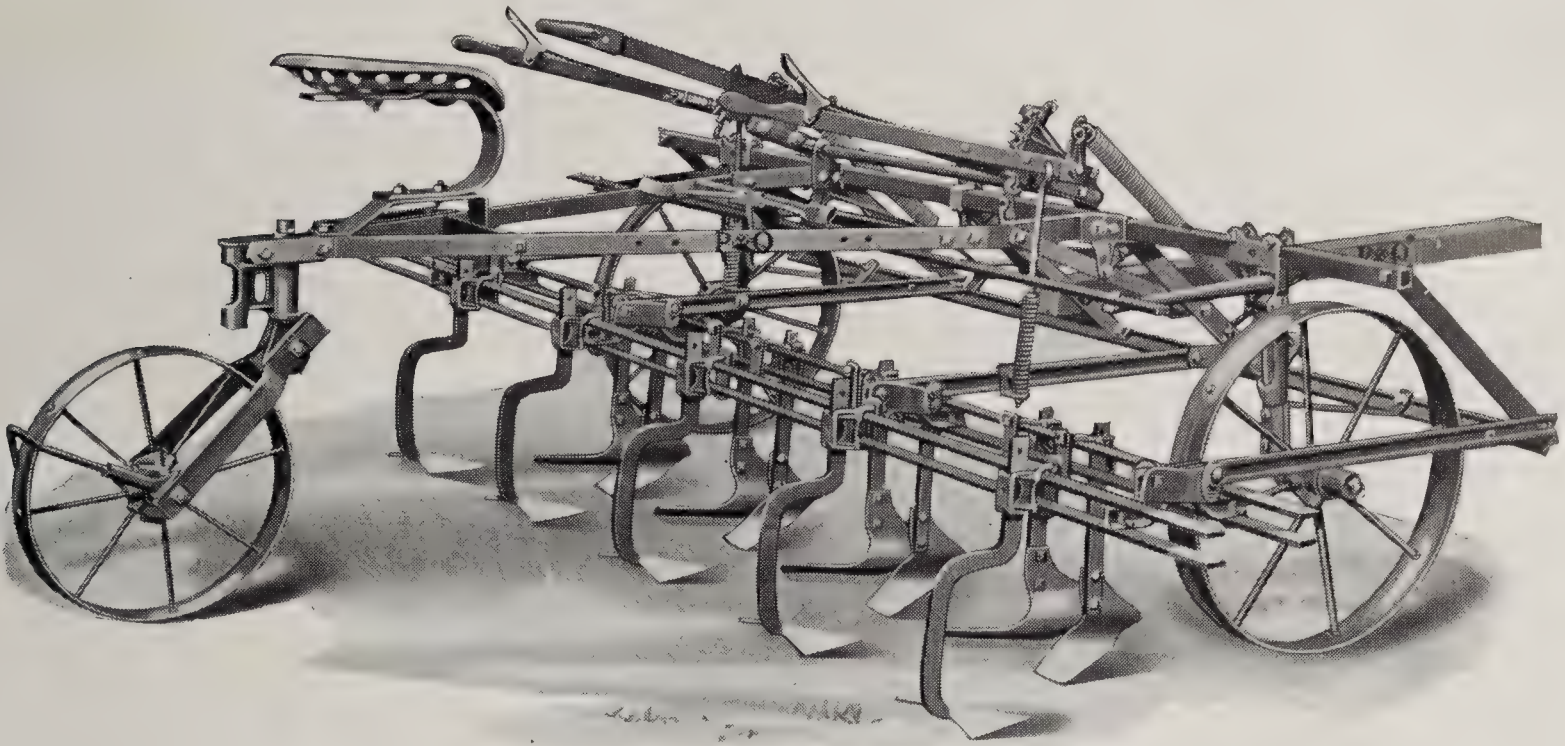
### Specifications—McCormick-Deering Beet Cultivator

Size	Description	Approximate Weight
No. 3A.	Two-row beet cultivator	393 lbs.





## McCormick-Deering Beet Cultivators



*Illust. 4—McCormick-Deering No. 8 Beet Cultivator with duck feet and knife weeders*

### A Four-Row Cultivator

The McCormick-Deering No. 8 beet and bean cultivator is adapted to the cultivation of four rows of beets or beans, whether planted 16, 18, 20, 22, 24, 26, 28 or 30 in. apart. It is very light in draft—two horses pulling it easily under ordinary conditions.

The frame is made of high quality steel, thoroughly trussed and braced throughout and very strong and rigid, while at the same time comparatively light.

Different localities call for different equipment, and for that reason these beet cultivators are furnished less the cultivating appliances, the purchaser selecting the equipment that will best suit his conditions.

An attachment can be furnished which enables the purchaser to cultivate three rows instead of four in beans, melons, peas, etc. This attachment comprises an extra rear wheel and parts necessary to set the rear wheels to straddle the middle row.

Cushion springs between the levers and the gang give the gang a yielding pressure, adapting it to ordinary irregularities in the ground. Strong balance springs assist the operator in raising the gangs.

### Suitable for Big Operations

Two pairs of parallel cross bars provide ample space for any number of attachments at varying widths. Each attachment can be independently adjusted for angle or depth. This double bar construction has three distinct advantages over the single bar—it offers more clearance between the cultivating appliances; it is very rigid and very strong.

The foot levers enable the operator to pivot the wheels either way, carrying the cultivating appliances to or away from the plants, assuring close cultivation and quick means of dodging plants that are out of line. A lock is provided to prevent the wheels from pivoting when transporting the cultivator.

The rear wheel axle bracket is provided with a socket so that no additional parts are required to attach an umbrella.

### Regular Equipment

Two-horse evener and neckyoke  
Thirteen clamps

### Extra Equipment

Wide two-horse evener and neckyoke  
Three-row bean attachment  
Special shovels for all purposes (See Illustration 5)

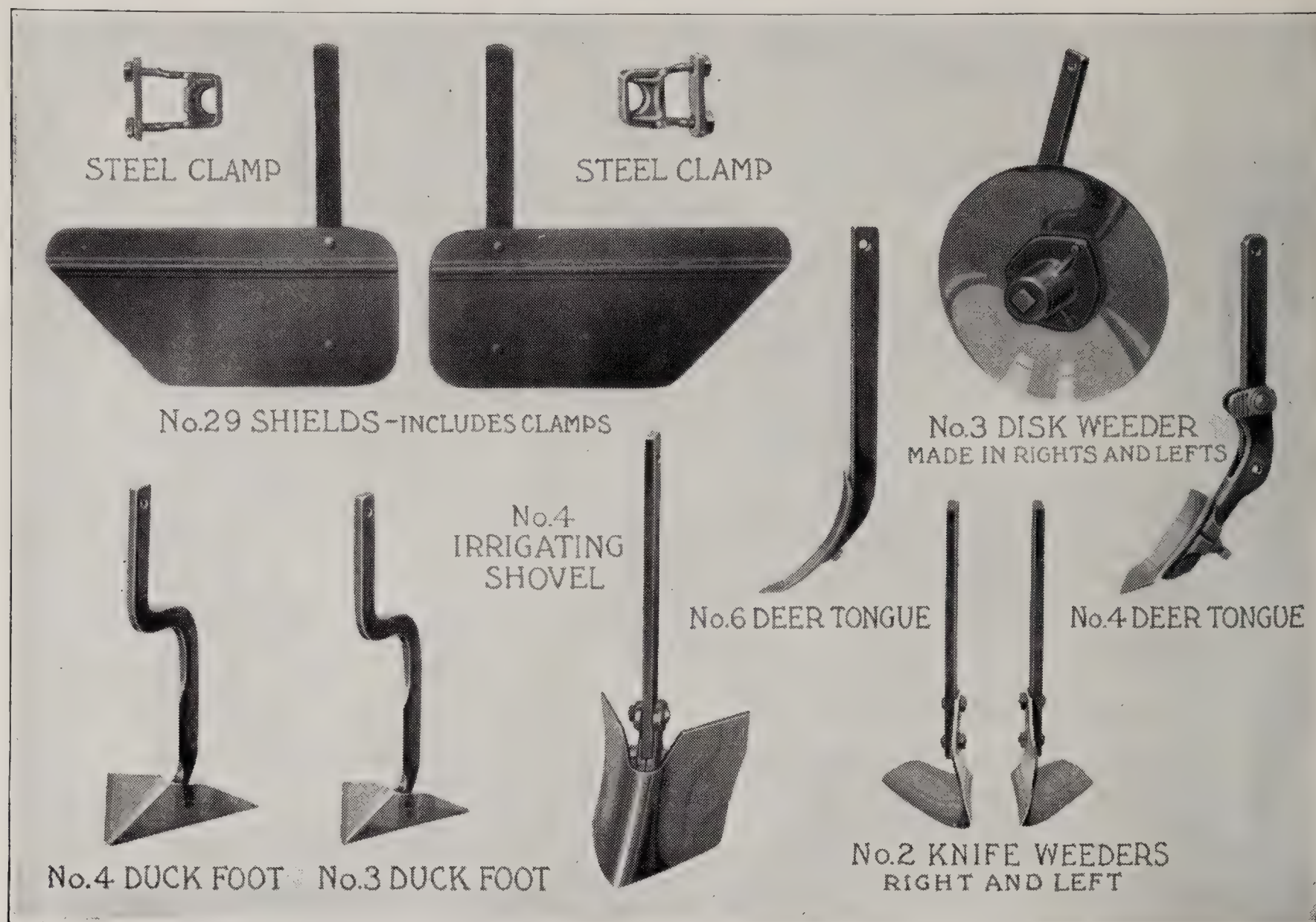
### Specifications—McCormick-Deering No. 8 Cultivator

Size	Description	Approximate Weight
No. 8	Beet and Bean Cultivator Three-row bean attachment	558 lbs. 56 lbs.





## Attachments for Beet and Bean Cultivators

*Illust. 5—Cultivating appliances for McCormick-Deering Beet Cultivators.*

As has been stated in the preceding pages covering the Nos. 3A and 8 beet and bean cultivators, different users call for different cultivating equipment and to enable the purchaser of a beet cultivator to obtain the machine best adapted to his particular requirements the cultivators are so built that the different attachments are interchangeable and the purchaser may select the equipment he needs.

These attachments are all made of the best quality of steel and can be placed on the crossbars of the cultivator for rows of varying widths, and in various combinations.

The No. 3 disk weeder is equipped with a chilled spindle with oil-soaked wood bushing and dust-proof

boxing. The cap which covers the end of the box is adapted to serve the purpose of a hard oiler also. The spindle arm is adjustable to give the disk the desired angle.

The irrigating shovel which is used to run water furrows has an adjustable block which permits setting it at the desired angle.

Note that there are two sizes of duck feet, right- and left-hand knife weeders, three different deer tongues, one of which is equipped with a wood break pin device and intended for use in foul ground.

Each cultivator is furnished with clamps sufficient for all ordinary requirements, but extra clamps can be furnished.

## Specifications—Cultivating Attachments

No.	Description	Net Weight
4	Irrigating shovel, each.....	8 lbs.
3	Duck foot, small, offset shank, each.....	5 lbs.
4	Duck foot, large, offset shank, each.....	5 lbs.
5	Deer tongue, pin break, each.....	5 lbs.
6	Deer tongue, each.....	3½ lbs.
2	Knife weeders, per pair.....	8 lbs.
3	Disk weeders, per pair.....	22 lbs.
29	Sheet iron shields, per pair.....	12 lbs.
	Steel clamps, complete, each.....	2 lbs.





## McCormick-Deering P & O Beet Pullers



*Illust. 1—McCormick-Deering No. 1 Walking Beet Puller. Rolling coulters are extra equipment.*

### Pulls Beets Without Injuring

This implement, as the name implies, is designed to pull the beets rather than to plow them out. The points run close to the roots, one on each side, and as they move forward, the beets are lifted by the upward incline of the lifting bars.

Owing to the depth at which the pullers must be worked, an extremely strong frame is necessary, one that cannot be strained nor twisted. On the McCormick-Deering puller the beams are spread wide, giving good clearance, and they are doubly braced.

The handles are long, giving good leverage, and are adjustable up and down to suit the operator.

The standards and runners are forged from extra heavy steel bars. The standard, and the brace to the rear end of the beam, are forged in one piece.

### Strong, Durable and Adjustable

The runners are provided with removable chilled shins and points which are held in place with wood pins. In addition to being removable the points are reversible, and when one side is worn down, they may be turned over and the other side used. As practically all of the wear is on these small parts, the cost of repairs is thus kept down to a minimum.

The lifting bars are adjustable up or down.

Two gauge wheels are furnished. They are adjustable, and any desired depth is easily secured and maintained. They also steady the puller, making it easier to guide.

Ten-inch rolling coulters can be furnished as extras. These can be used to advantage when the beet tops are so large as to interfere with the efficient operation of the puller.

### Specifications—McCormick-Deering P & O No. 1 Walking Beet Puller

Size	Description	Approximate Weight
No. 1	Walking beet puller	220 lbs.

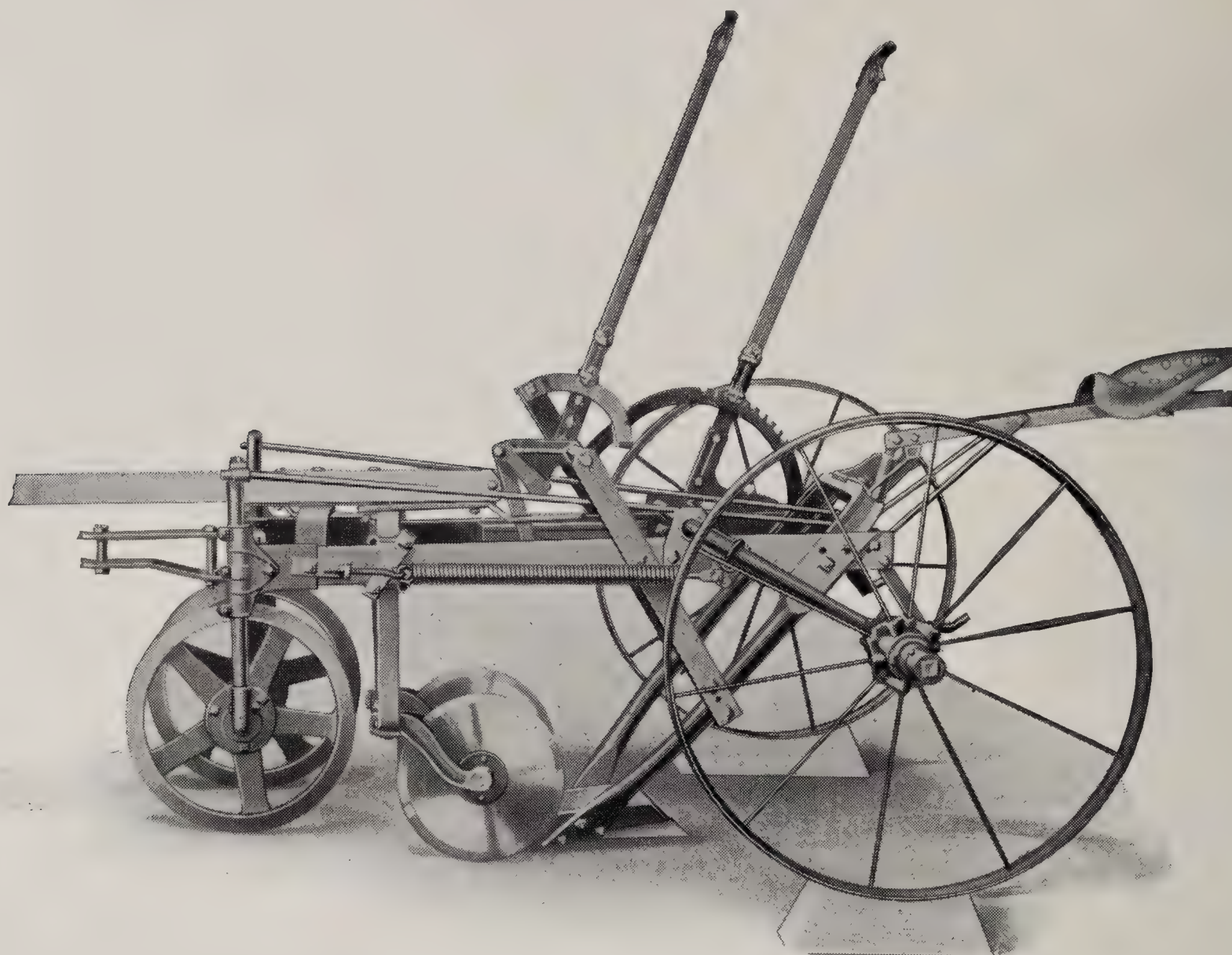
Regular Equipment: Gauge wheels.

Extra Equipment: Right and left rolling coulters.





## McCormick-Deering P & O Beet Pullers



*Illust. 2—McCormick-Deering No. 2 Riding Beet Puller.*

### Easily Controlled

The carrying wheels are so located as to balance the frame on these wheels as the lifters are raised, this feature being obtained by the forward swing of the axles.

The frame is made of high-grade steel which is much stronger than common steel and therefore secures the necessary strength of frame without too much weight.

Ample clearance is allowed in the frame for foliage and the wide bars are connected at the rear ends by a strong steel arch which places the seat and seat connections high enough to permit the passage of the heaviest foliage.

Two levers give perfect control. The main lever raises and lowers the pullers, the operator being assisted by heavy springs which counterbalance the weight of the pullers and rear end of frame. The other lever raises the front end, including the front wheels, which are carried off the ground when the puller is being transported. The levers are conveniently located on the right-hand side of the machine.

### Runs Straight

The standards are also made of high-grade steel and are very strong and rigid. They are set at the correct angle to resist the naturally heavy strain to which they are subjected, which, in connection with the high quality of steel and the rigid frame bracing, insures ample strength in hard soil.

The front or guide wheels are controlled by the pivoting of the seat. As the seat swings to either side the operator's weight is carried upward on slightly inclined surfaces on the seat bracket. This naturally causes the driver's weight to keep the front wheels running straight, as the seat returns to the center of the machine when pressure on the foot levers is relieved. See Illustration 3, next page.

### Regular Equipment

PORC-20, right-hand, and PORC-21, left hand rolling coulters. POWE-53, three-horse evener. Two-horse neckyoke with three holes at each end, so neckyoke can be adjusted for different widths of rows. Chilled, detachable lifter points. Approximate weight No. 2 Beet Puller, 615 lbs.





## McCormick-Deering No. 2 Riding Beet Puller

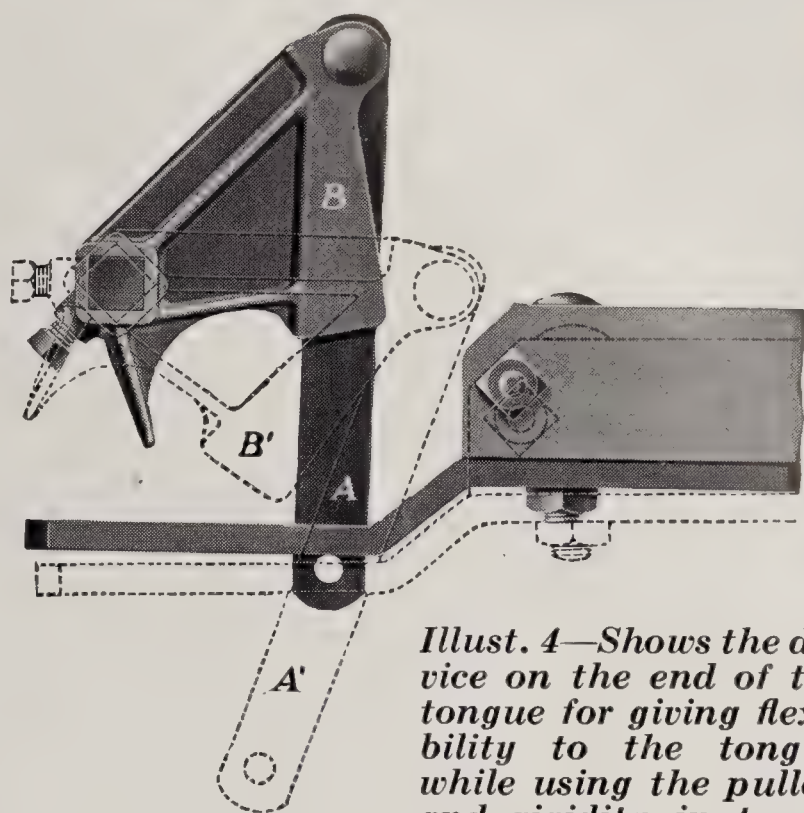


*Illust. 3—Rear view of seat and connection. The arrow indicates the device that causes the operator's weight to bring him back to center after shifting seat to guide puller.*

The hitch provides ample adjustment. It can be set in the center for two or four horses or to the side for three horses.

The main wheels are 34 in. in diameter. They are equipped with adjustable wheel boxes which permit setting the wheels for different widths of tread. The wheel box is dust-proof, being closed at the inside end with a sand band and at the outer end with a hard oil screw cap.

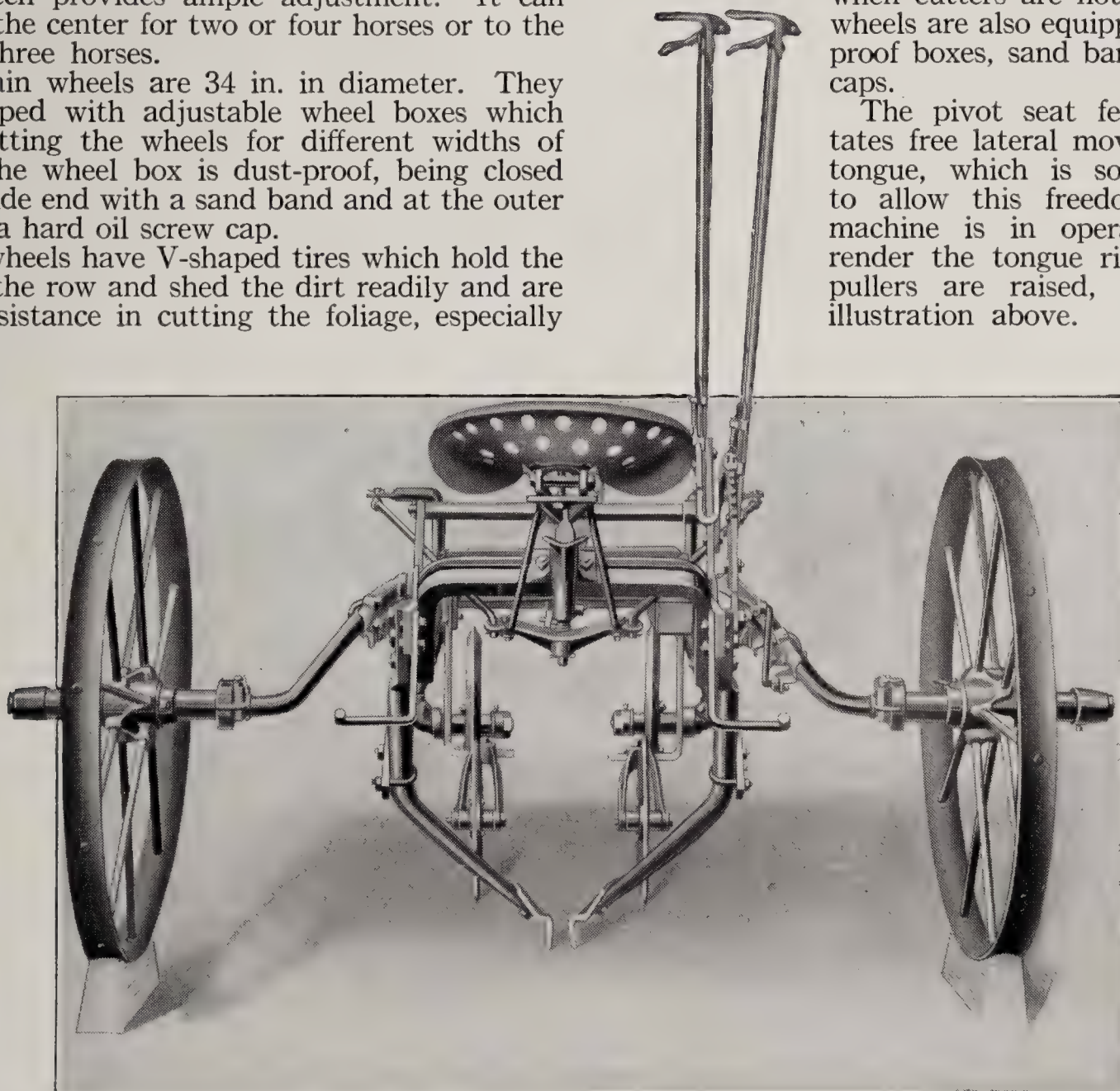
Front wheels have V-shaped tires which hold the puller to the row and shed the dirt readily and are also of assistance in cutting the foliage, especially



*Illust. 4—Shows the device on the end of the tongue for giving flexibility to the tongue while using the puller, and rigidity in transporting. The solid lines show the position in transporting. As the puller is lowered these parts assume the positions shown by the dotted lines, freeing the link "a" from the jaws "b."*

when cutters are not used. These wheels are also equipped with dust-proof boxes, sand bands and screw caps.

The pivot seat feature necessitates free lateral movement of the tongue, which is so provided as to allow this freedom when the machine is in operation but to render the tongue rigid when the pullers are raised, as shown in illustration above.

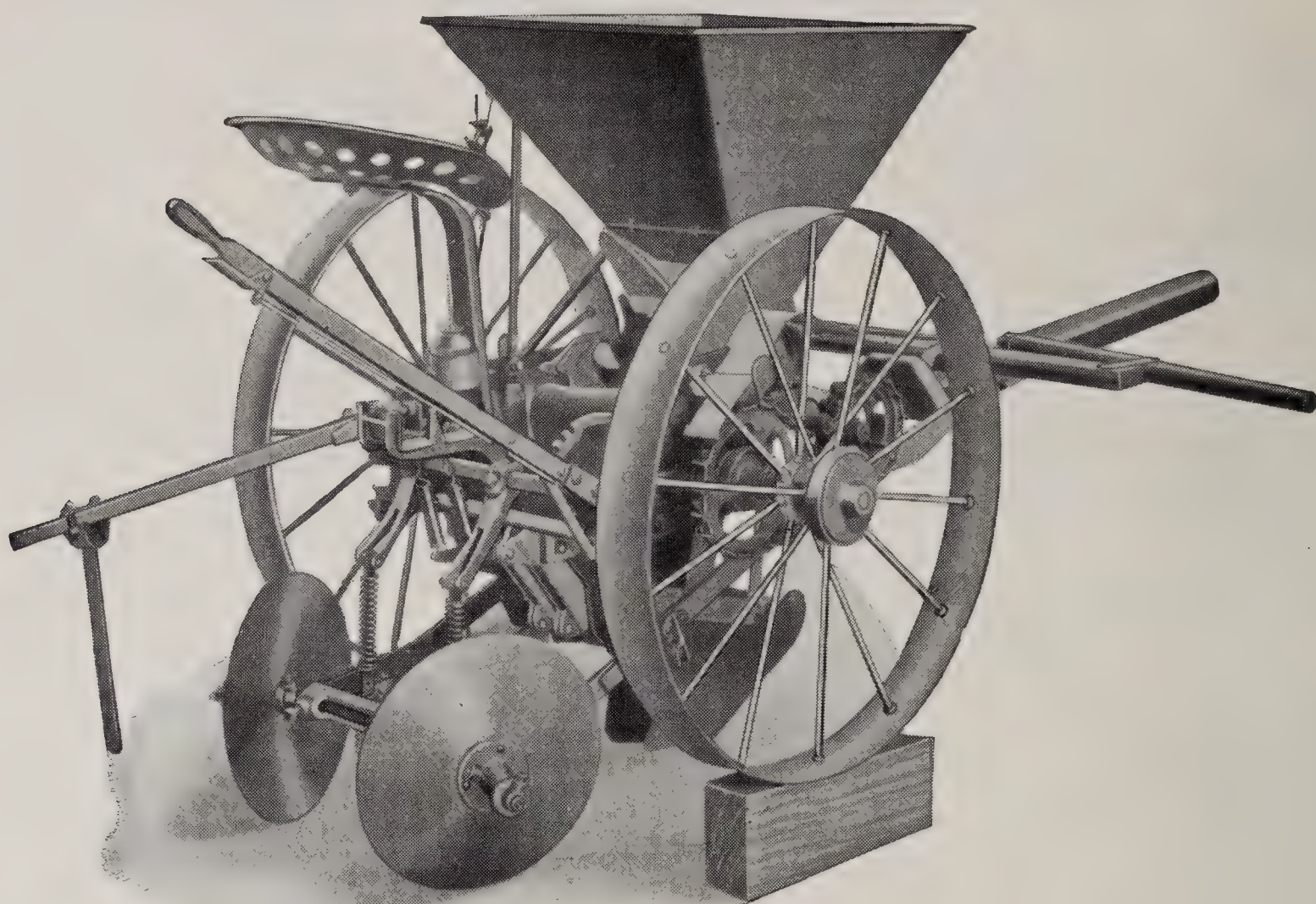


*Illust. 5—Rear view of No. 2 Riding Beet Puller.*





## McCormick-Deering Potato Planter



*Illust. 1—McCormick-Deering One-Row Potato Planter.*

### Short Coupled and Compact

The McCormick-Deering one-row potato planter is simple in construction; short coupled for easy handling and durable.

It is designed to handle cut seed or small whole seed, with a degree of accuracy approaching as nearly one-hundred per cent as it is possible to obtain with a mechanical planter.

The hopper has a capacity of about three bushels. It is placed directly above the seed chamber, so that the flow of seed from the hopper to the seed chamber is by the shortest possible route. A corrugated feed wheel insures a positive flow of seed as needed.

### Automatic Feed Control

The picker arms, which are of the approved pattern, work in a large, bowl-like feed chamber. In order to insure efficient operation of the picker arms, and avoid having the seed brushed off the pickers, it is necessary to keep the feed chamber about half full—neither much under nor much over. The McCormick-Deering planter has a new and decidedly improved way of controlling this desired feed level. A small throw-out, which revolves around the picker-arm unit, connects with the clutch which drives the feed wheel. When the seed reaches the proper level, this throw-out, pressing against the seed, throws the feed-wheel clutch out of gear and stops the feed wheel, thus holding up the flow to the feed chamber until the level falls far enough to let the throw-out clear the top of the seed, when the feed wheel is again thrown into gear.

### Operator Sees It All

The feed chamber is open, and the pickers are in plain view of the operator, so that he may be sure, all the time, that everything is working properly.

The furrow opener and covering disks are both lowered or raised at once by a single lever, and the planting mechanism is started and stopped at the same time, and automatically. Another distinctly McCormick-Deering feature is in the foot throw-out which enables the operator to stop the planting mechanism and leave the coverers down until the last seed is covered.

The furrow opener is designed to do its work with as little soil resistance as possible, yet hold the furrow open until the seed is deposited, a feature which is especially desirable in loose soil. It is pushed, rather than pulled through the soil, and cannot ride out, but penetrates and makes a furrow of the desired depth even in hard ground. The depth of the furrow opener can be adjusted instantly, by means of a spring latch on the adjusting bar.

### Regular Equipment

Shoe Furrow Opener  
Spring Marker  
Disk Coverers  
Sprockets for 13 and 15-inch spacing

### Extra Equipment

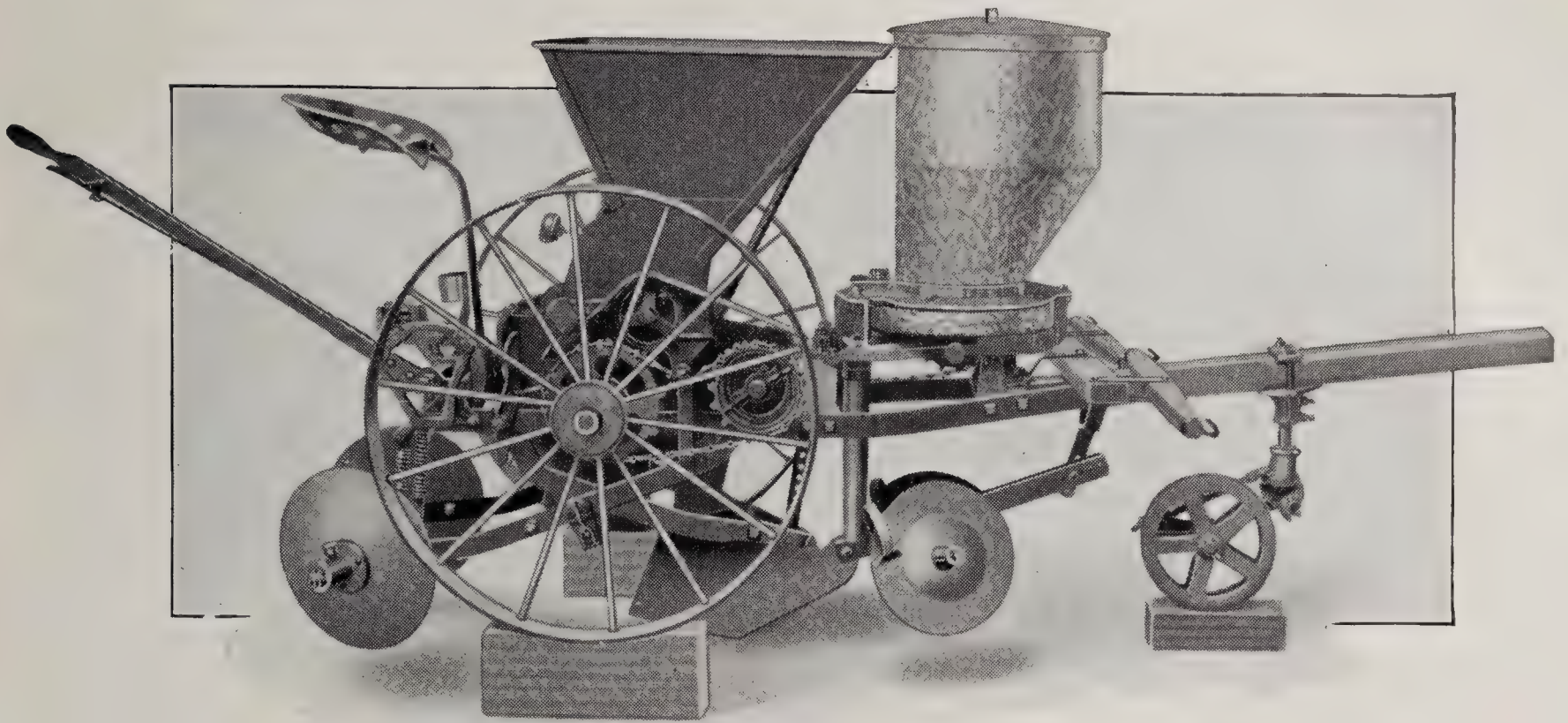
Fertilizer Attachment  
Caster Wheel. Should always be ordered when fertilizer attachment is to be used.  
Two-horse evener  
Neck yoke  
Rolling Coulter (Can not be used on fertilizer planters.)

Approximate weight McCormick-Deering Potato Planter as regularly equipped, 585 lbs.





## McCormick-Deering Potato Planter



*Illust. 2—Fertilizer attachment can be supplied for McCormick-Deering Potato Planter at extra cost. Caster wheel tongue truck should always be ordered with this attachment.*

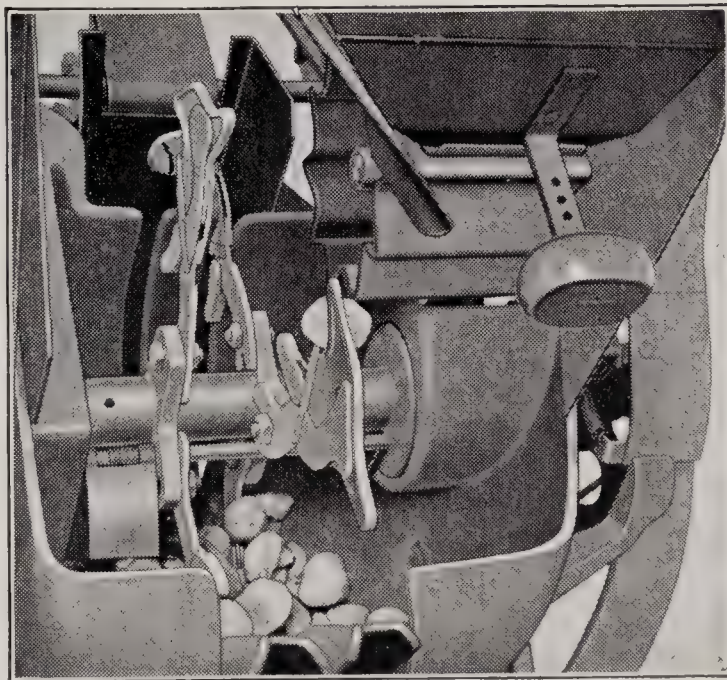
The feed chamber must be kept about half full, for the pickers to work efficiently. The seed level is automatically controlled, as shown in Illustration 3. The feed chamber is open above, and the operator can always see the picker arms and be sure that the seed has not run out, and that everything is working properly.

The furrow opener and covering disks are raised or lowered together, and the planting mechanism is started or stopped automatically as they are raised or lowered. A foot throw-out enables the operator to stop the seed mechanism before raising the coverers, and this enables him to cover the last seed planted before raising the coverers.

A rolling coulter attachment can be furnished. It is not needed under ordinary conditions, but where trash or manure is heavy it is of great assistance. Planters equipped with fertilizer attachment cannot use the rolling coulter and do

not need it as the furrowing ends of the fertilizer attachment serve the same purpose.

The fertilizer attachment, which comes furnished on special order, will handle all of the commercial fertilizers, and will distribute from 300 to 3,000 pounds to the acre, depending upon the nature of the fertilizer. The quantity is easily regulated. The attachment can be very quickly put on. The fertilizer-driving sprocket is put on all planters, whether they go out with this attachment or not.



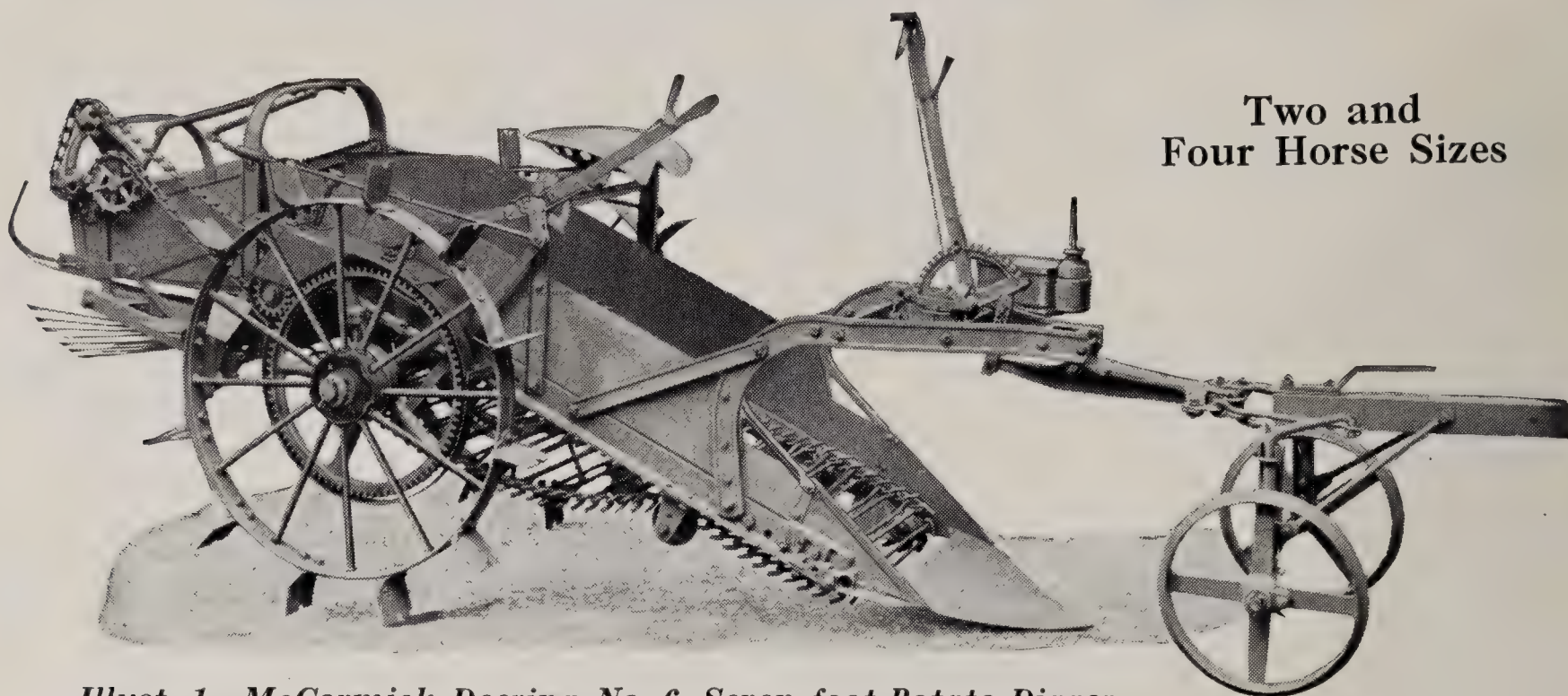
*Illust. 3—Looking down into the potato planter feed chamber. In the upper right-hand corner is the weighted gate of the seed hopper, and the corrugated feed wheel. In the lower left-hand corner is the "flopper" which, when the seed level in the feed chamber rises to the proper level, is pressed upward and throws the feed wheel out of gear.*

The fertilizer attachment has two disk furrow openers. These open two furrows in which the fertilizer is deposited. The planter opener splits the ridge between these fertilizer furrows and shoves the soil over, covering the fertilizer. The fertilizer is therefore deposited where the roots of the plants can get it when needed, but does not come in contact with the seed at any time.





## McCormick-Deering Potato Diggers

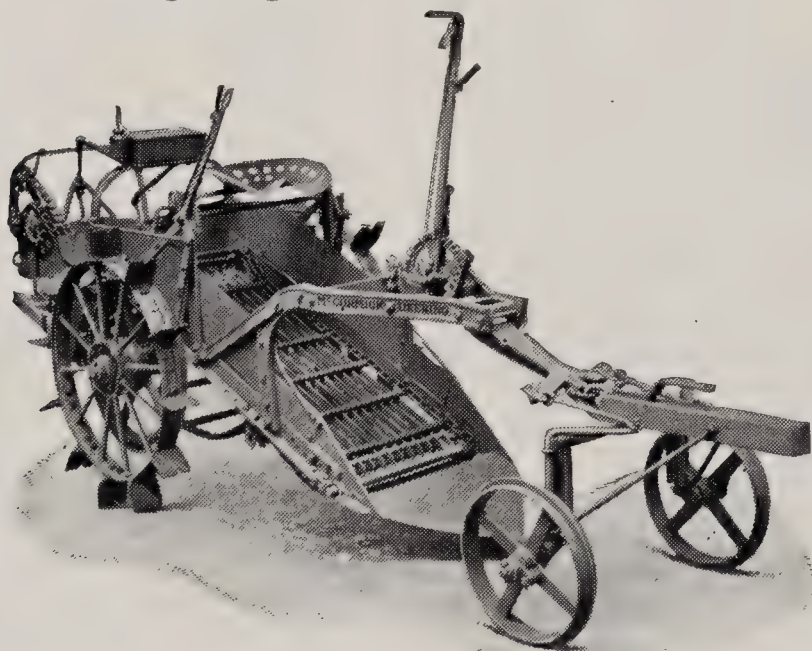


Two and  
Four Horse Sizes

*Illust. 1—McCormick-Deering No. 6, Seven-foot Potato Digger.*

### Effective Separation

Agitation is secured by elongated or oval sprockets which give the elevator a brisk up and down motion that is correct for usual conditions. If the soil is very light and too easily shaken out, the agitation can be regulated to suit by removing the large agitating sprockets at the top of the elevator, putting the smaller sprockets at the top and a pair of smooth rollers (furnished) in place of the bottom sprockets. The rear shaker has a  $2\frac{1}{8}$ -inch throw but can be given greater throw if desired.



*Illust. 2—The No. 4 "Riddle" or Bar Grate Potato Digger.*

### Other Features

Main bearings are machine bored. Axles are smooth and true. Bottom rollers and supporting rollers, agitator sprockets and spindles are made of the hardest white iron. So are the tooth portions of the elevator driving sprockets.

Wheel and main drive shaft bearings, shaker shaft bearings and shaker pitmans are equipped with hard oilers.

The "auto steering" tongue truck makes a short turn possible—no tipping or straining when turning or working over uneven ground.

### Riddle Type Digger

There are some sections where the riddle or bar grate type of digger is preferred. The McCormick-Deering digger can be supplied with riddle elevator when wanted. It is adapted to very stony ground and no stone trap is necessary. The riddle digger cannot be converted to the rod link type or vice versa.

### Regular Equipment

Tongue truck. Standard shovel.

### Extra Equipment

Tractor hitch.

Road rings (specify for 30 or 36-inch wheels).

Rolling coulters.

Stone trap for rod link diggers.

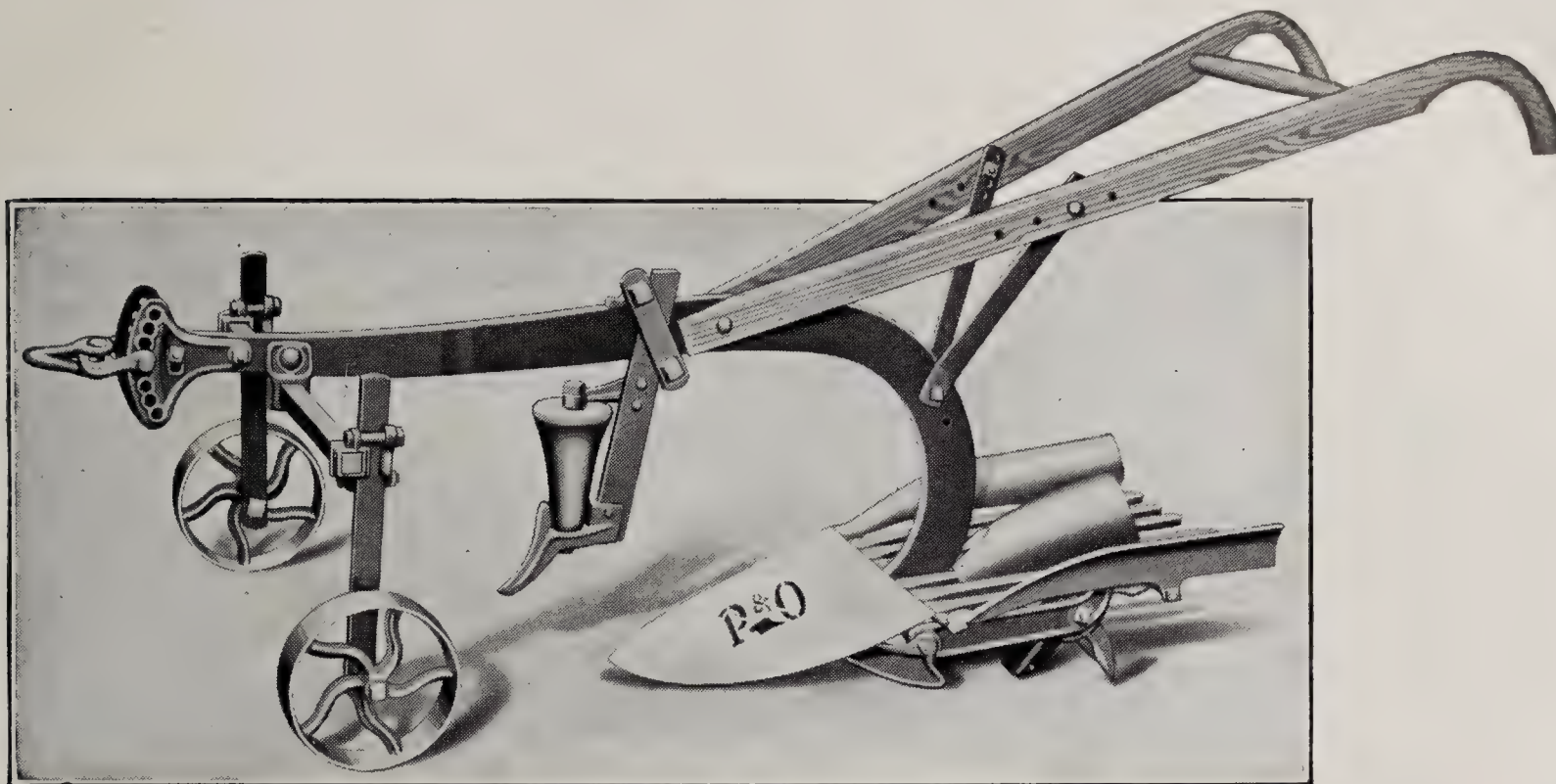
### Specifications—McCormick-Deering Potato Diggers

No.	Size	Type Elevator	Hitch Furnished	Diam. Main Wheels	Delivery	Weight, Pounds	Special Equipment
4	6-foot	Riddle	2-Horse	30-inch	Shaker and Vine Turner	1040	Roller Tongue Truck
5	6-foot	Rod Link	2-Horse	30-inch	Shaker and Vine Turner	1005	Short Shovel
6	7-foot	Rod Link	4-Horse	36-inch	Shaker and Vine Turner	1110	Side Hill Lugs
7	7-foot	Rod Link	4-Horse	36-inch	Extension Elevator	1095	Four-horse hitch for Nos. 4 and 5 Parts for attaching New Way, Collis and Cushman engines Extension Elevator for No. 6, or Shaker and Vine Turner for No. 7





## McCormick-Deering Potato Diggers



*Illust. 3—McCormick-Deering P & O No. 3 Potato Digger.*

### Shaker

The grate is hinged at the front. A five-pointed wheel under the grate gives it an up-and-down motion which thoroughly sifts the soil from the potatoes as they pass over the rods. The outside fenders on the sides of the grate keep the potatoes on the grate and cause them to be deposited behind the digger without scattering, making it easier to gather them up.

Potatoes dug with the McCormick-Deering P & O potato digger are clean and whole and bring a better price on the market than potatoes dug the old way.

### Blade

The blade is made of solid steel and is perfectly straight, to scoop the potatoes up onto the shaker. It gets clear down under the potatoes without cutting any of them. Furthermore, there is no waste occasioned by potatoes being left in the ground.

### Runners

The runners steady the digger and prevent the jar occasioned by the action of the shaker wheel from being transmitted to the digger itself. In other words, the vibration of the shaker wheel is not transmitted to the hands of the operator.

### Forecarriage

The forecarriage consists of a heavy lateral cross bar securely fastened to the beam and long enough to place the gauge wheels far enough apart so that they straddle the rows and do not crush or mutilate the potatoes. Each wheel runs on the solid ground between the rows, thereby keeping the digger on an

even course and permitting it to work at a uniform depth. This feature of having two gauge wheels set wide apart also prevents clogging as often happens with diggers having but one gauge wheel. The wheels can be adjusted up or down or sideways to suit conditions.

### Fender

The fender comprises a steel shank and a wooden spool designed to clear away the weeds and vines, preparing the way for the blade. It is adjusted up or down as the digger is adjusted to run deep or shallow.

### Beam

The beam is made of flat bar steel, which gives the necessary strength without adding undue weight.

### Hitch

The hitch consists of a regular walking plow clevis, cross clevis and shackle, which gives ample adjustment laterally and vertically.

### Handles

The handles are made of well-seasoned oak and are adjustable up or down to suit the operator.

### Regular Equipment

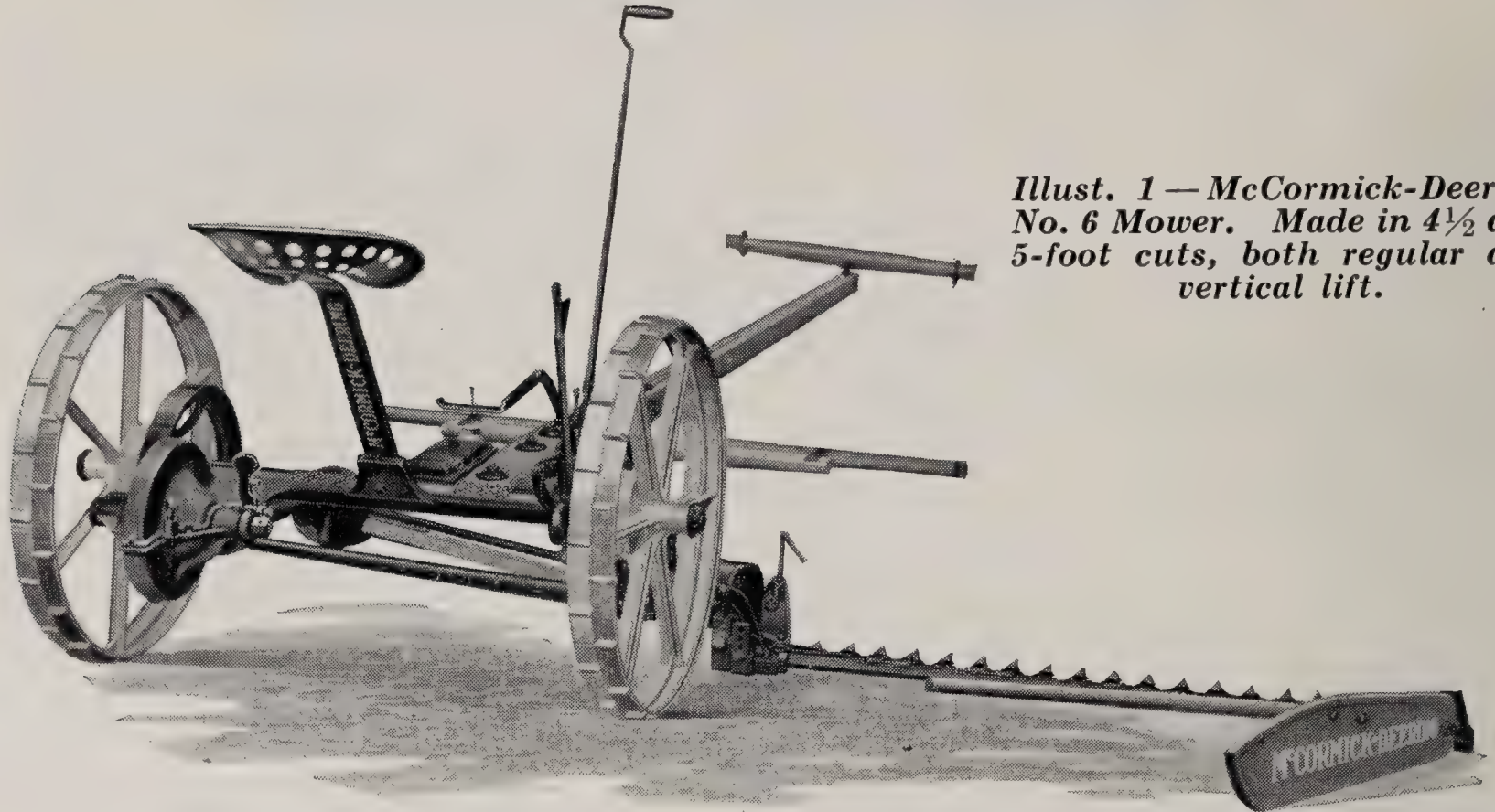
Furnished with Forecarriage and Fender.

No.	Description	Approx. Weight
3	Potato Digger . . . . .	153 lbs.





## McCormick-Deering Mowers



*Illust. 1 — McCormick-Deering No. 6 Mower. Made in 4½ and 5-foot cuts, both regular and vertical lift.*

### Every Up-to-Date Feature

In concentrating on the manufacture of one line of mowers, the Harvester Company has incorporated in the McCormick-Deering the very best features which have been produced through many years of experimental work and field trials.

The cutter bar is made of high-grade steel, heat-treated and tempered in oil. It is reinforced with a rib which extends the entire length of the bar. The guards are equipped with serrated ledger plates, and the knife is equipped with the highest quality of heat-treated and tempered sections which give a clean, shear cut. Wearing plates 8 inches in length prevent the knife from wearing the bar. The weight of the cutter bar is carried on the wheels so that the guards ride over the ground.

### Durable Wearing Parts

The knife head is made of malleable iron, under a high-quality process of manufacture. The ball of the knife head is case-hardened. Special hardwood pitman with automatic adjustment, which maintains a perfect connection between the knife head and pitman, is regularly supplied. The connection between the pitman and knife head does not wear spoon-shaped or cause the mower to work hard. The pitman box is equipped with bronze bushings. The push bar is located low, which helps to make the cutter bar float over the ground. Perfect alignment is maintained between the pitman and knife. The mower is operated through external gears of ample size. The bearings

on the crankshaft are easily removed and replaced when worn. High-grade roller bearings are used on the main shaft and bevel gear shaft, also the adjustable ball thrust bearing maintains perfect mesh on the bevel gears. The main lifting lever is equipped with automatic locking device; no detent lever needed. All holes in the main frame are drilled and reamed in one operation to insure perfect alignment.

### McCormick-Deering Big 6 Mower

The McCormick-Deering Big 6 mower is constructed exactly like the McCormick-Deering No. 6, except that it is built heavier throughout. The frame is larger and stronger and the wheels are higher. See specifications.

### Regular Equipment

Tongue, neckyoke, and doubletrees on 2-horse mowers. Two knives or sickles. Thills and whiffletree on new vertical lift 1-horse mower. Tools.

### Extra Equipment

Reaping attachment for all styles of mowers, 3½-foot, 4½-foot and 5-foot cuts. Buncher attachment for all 2-horse mowers, 4½-foot, 5-foot, 6-foot and 7-foot cuts. Weed attachment for 2-horse mowers. Weed or brush bars with heavy knives, 3-foot, 3½-foot, 4½-foot and 5-foot cuts. Pea and bean lifters. Grain lifters, same as on binder. Two-horse hitch for vertical lift 1-horse mower. Tractor hitches. Special wheels with rubber tires.

### Specifications—McCormick-Deering Mowers

Kind	Width of Cut	No. Horses	Wheels		Wheel Tread	Shipping Wt., Reg. Equipment
			Height	Width, Face		
No. 6 regular lift.....	4½-foot	2	32 inches	3¾ inches	46¾ inches	715 lbs.
No. 6 regular lift.....	5 -foot	2	32 inches	3¾ inches	46¾ inches	720 lbs.
No. 6 vertical lift.....	4½-foot	2	32 inches	3¾ inches	46¾ inches	720 lbs.
No. 6 vertical lift.....	5 -foot	2	32 inches	3¾ inches	46¾ inches	725 lbs.
No. 6 regular lift.....	4½-foot	2	34 inches	4¼ inches	49¾ inches	780 lbs.
Big 6 regular lift.....	5 -foot	2	34 inches	4¼ inches	49¾ inches	790 lbs.
Big 6 regular lift.....	6 -foot	2	34 inches	4¼ inches	49¾ inches	800 lbs.
Big 6 regular lift.....	7 -foot	2	34 inches	4¼ inches	49¾ inches	815 lbs.
One-horse vertical lift.....	3½-foot	1 or 2	30 inches	3¼ inches	36¾ inches	550 lbs.





## McCormick-Deering Mowers

### McCormick-Deering Vertical Lift Mowers

On most farms a regular lift mower meets all cutting requirements, but frequently there is a rough or only partially cleared field where grass cannot be cut with the regular lift mower without stops or complete neglect of the crop that grows close to trees, stumps and stones. Often there are trees in a meadow. It is desirable to cut close to them, but it cannot be done without wasting more time than the grass is worth. The McCormick-Deering vertical lift mower takes care of all these conditions. It is also an excellent machine for cutting in orchards, large parks, cemeteries, and golf courses because of the easy and quick adjustment of the cutter bar to unusual conditions.

#### Similar to Regular Lift

The McCormick-Deering vertical lift mower has all the good features of the regular lift mower, and in addition is made so that the cutter bar can be raised to a vertical position and lowered without stopping the team and without throwing the machine out and in gear by hand. The raising device operates directly on the clutch, throwing the machine out of gear just before the raising lever is brought to the first notch of the quadrant.

In lowering the bar, the clutch is thrown in again automatically when the bar is at the proper position. The cutter bar can be raised high enough with the foot lever to pass over average obstacles. The vertical lift mower is just as useful as the regular lift in ordinary cutting.

### McCormick-Deering One-Horse Mower

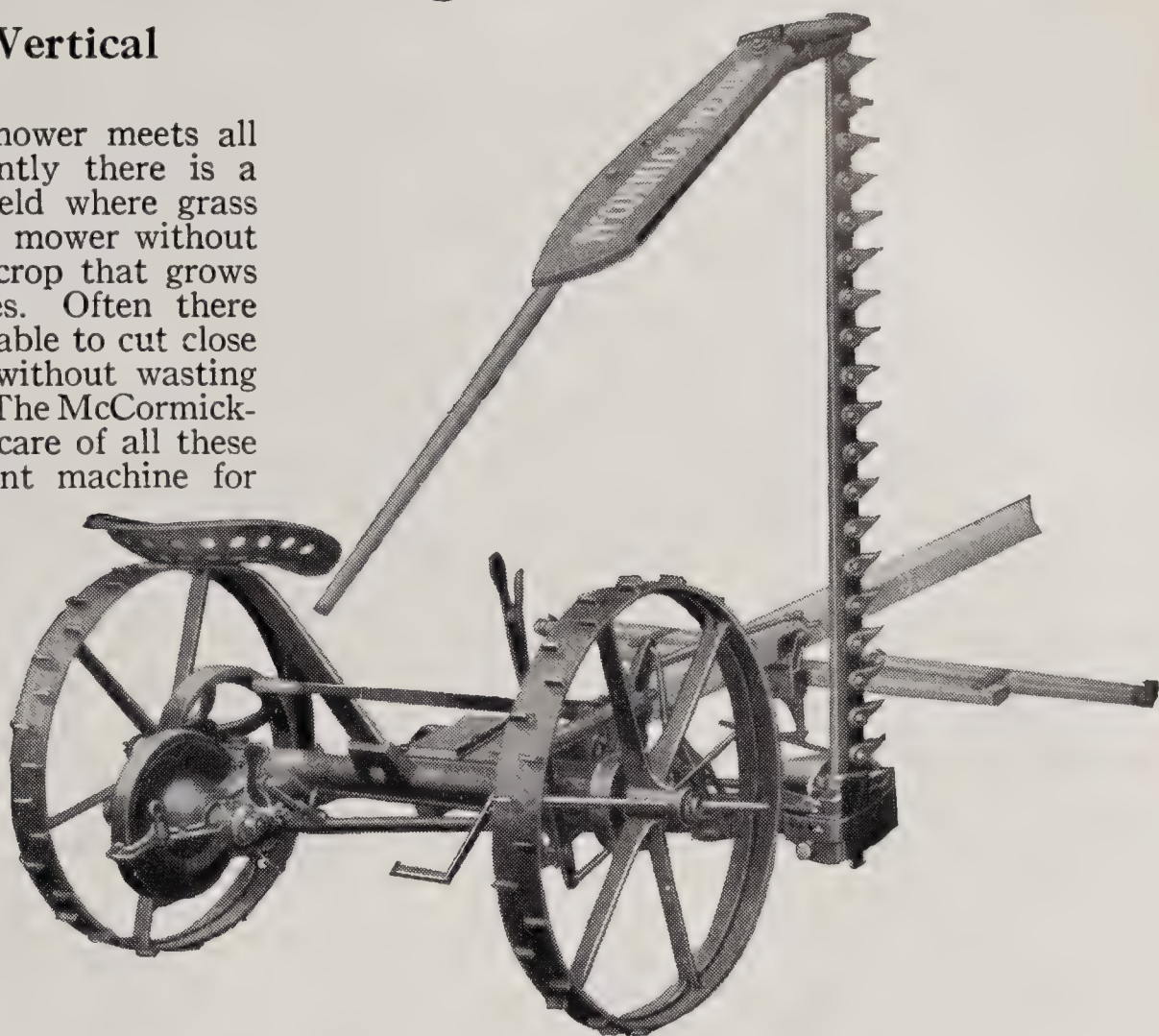
Where grass is allowed to grow to a considerable height in parks, golf courses, cemeteries, etc., a

Well-built, serviceable knife grinder can be supplied.

(See page 76)



*Illust. 3—McCormick-Deering One-Horse Mower used on small farms and for mowing grass in parks, cemeteries, and golf courses.*



*Illust. 2—McCormick-Deering Vertical Lift Mower. Construction is similar to regular lift mower, but cutter bar can be raised to vertical position to facilitate cutting close to trees and other upright obstacles.*

mower is about the only machine with which it can be cut. The McCormick-Deering one-horse mower is well suited to this work because it is a vertical lift mower, and its compact construction adapts it to cutting between trees and around stones and other obstructions. The machine is also well adapted to cutting hay on small farms.

#### Similar Construction to Standard Mower

The general construction of the one-horse mower is the same as the standard vertical lift mower except that it is smaller and of lighter construction. The machine comes regularly equipped with thills for operation with one horse, but at slight additional cost an attachment can be supplied so that a pole can be put on the machine for operating it with two horses. The one-horse mower is made in one size only, with 3½-foot cutter bar.







## McCormick-Deering Mowers

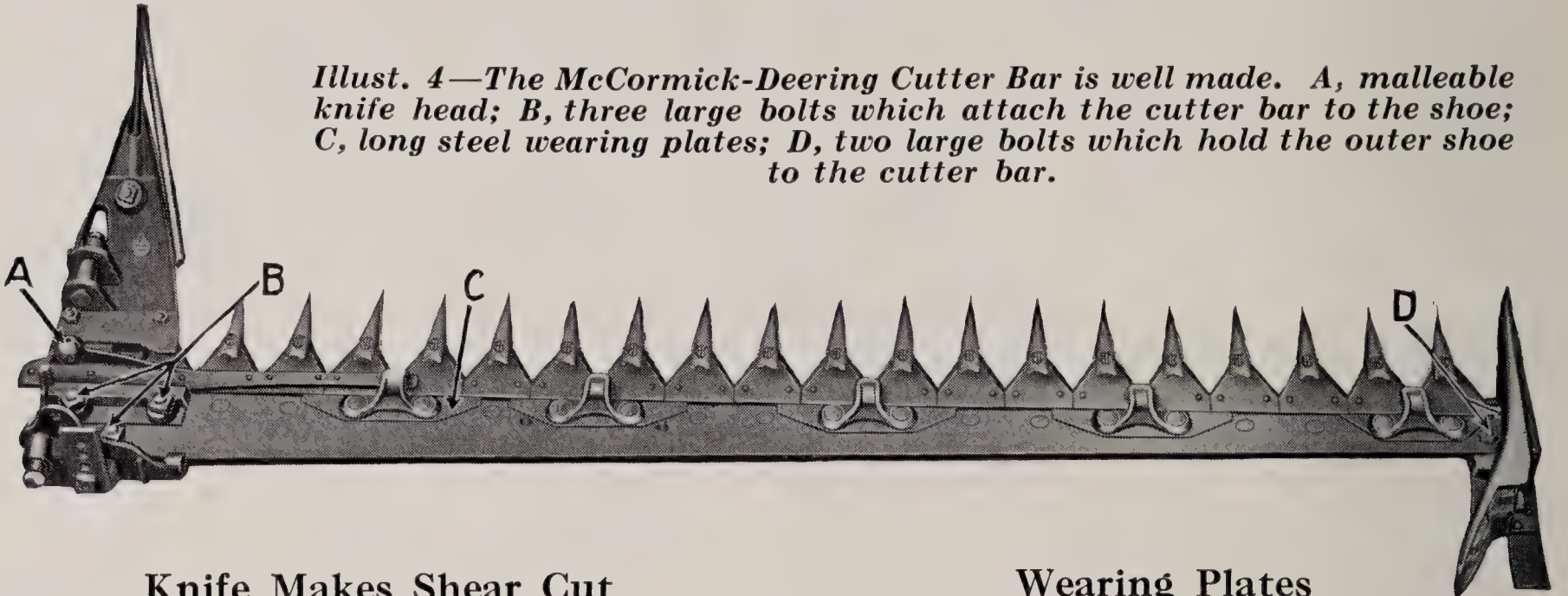
### Cutter Bar

The cutter bar works close to the ground under the most adverse conditions and there are bound to be severe strains thrown upon it. To be successful it must be made to withstand these unusual strains and remain in perfect alignment. It is here that the McCormick-Deering cutter bars show superiority in design and in materials. They are heat treated, which adds strength and flexibility to the bar.

### Cutter Bar Mechanism

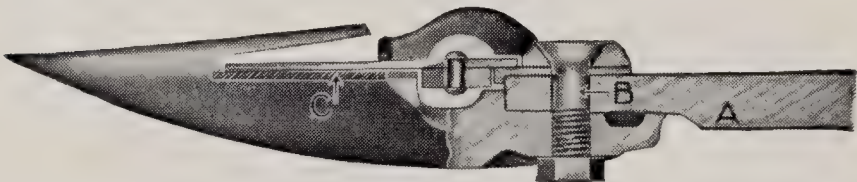
The weight of the cutter bar is carried on the wheels of the mower. This is done by the use of a special mechanical arrangement which balances the weight of the cutter bar. This mechanism so transfers the weight of the bar to the wheels as to make practically a floating cutter bar. This construction allows the cutter bar to pass over obstructions and rough ground.

*Illust. 4—The McCormick-Deering Cutter Bar is well made. A, malleable knife head; B, three large bolts which attach the cutter bar to the shoe; C, long steel wearing plates; D, two large bolts which hold the outer shoe to the cutter bar.*



### Knife Makes Shear Cut

Illust. 5 shows that the cutting edges of the knife and the ledger plates are always kept in contact. This is done by tapping down the clips which insures a shear cut at all times.



*Illust. 5—Sectional view of cutter bar and guard. A, tapered rib to reinforce cutter bar; B, large bolt which holds guard to cutter bar; C, removable ledger plate.*

### Wearing Plates

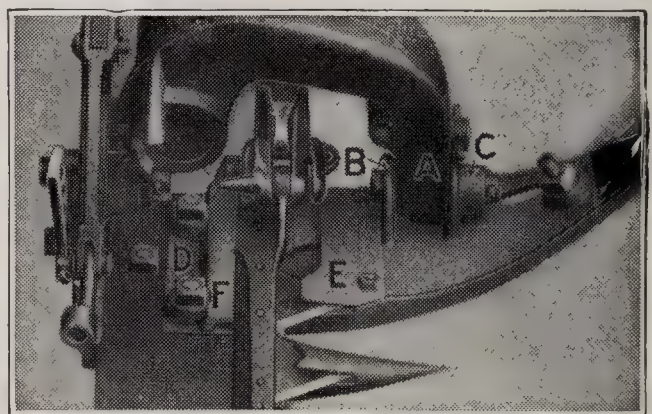
The wearing plates (C, Illust. 4) are long (8 inches). They support the knife throughout its entire length, and add to the life of the mower.

### Divider

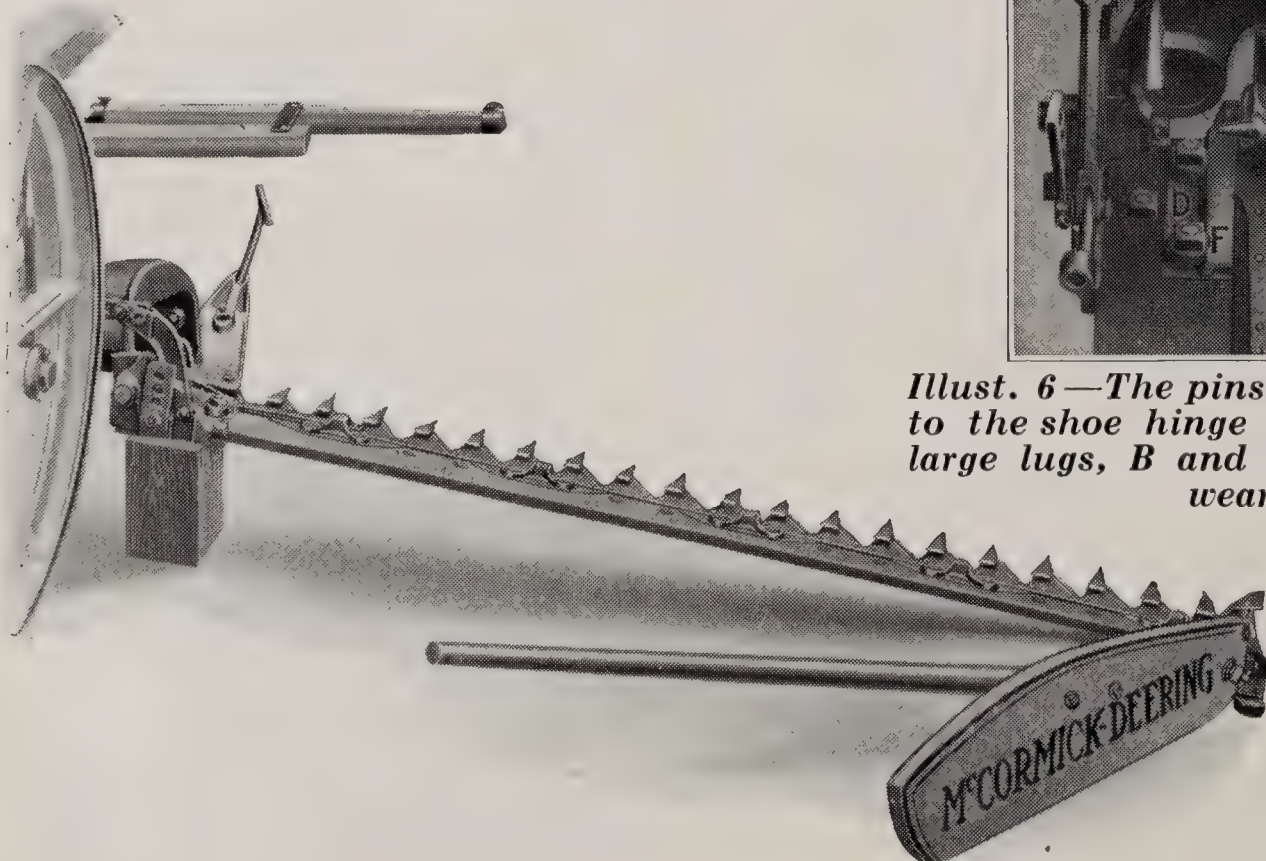
The divider or tracker board is reinforced with a large steel plate. The board is attached to the outer shoe with a spring connection which permits it to yield in case it strikes an obstruction.

### Guards

The guards curve up near the point, which permits close cutting without digging into the ground.



*Illust. 6—The pins which hold the inner shoe to the shoe hinge are large. Note the two large lugs, B and C. E, F and D are steel wearing plates.*



*Illust. 7—Either end of the cutter bar can be raised or lowered, yet the knife runs smooth. The flexible gag arrangement makes this possible.*





## McCormick-Deering Mowers

### Wearing Plates

The plates under the knife are made of high-grade steel, case-hardened, which adds to their wear-resisting qualities.



Fig. 1

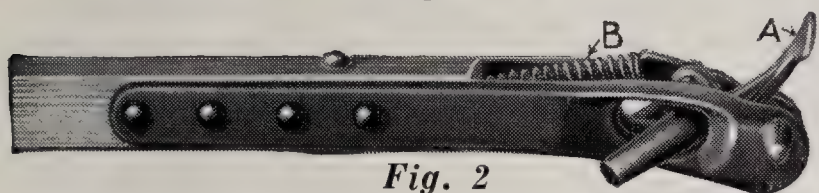
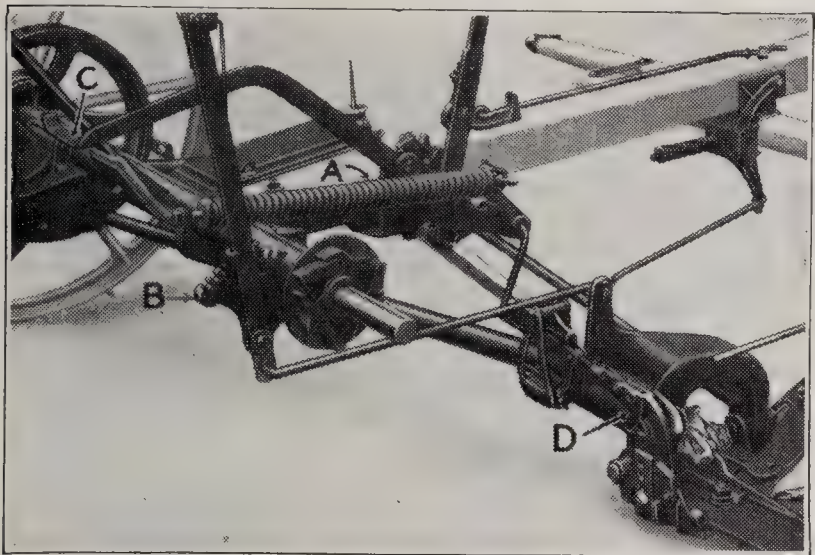


Fig. 2

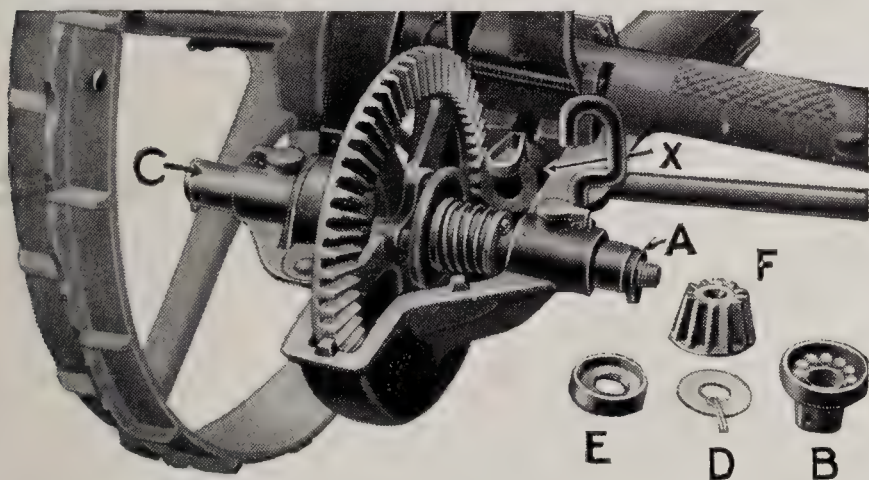
*Illust. 8—Upper view shows automatic pitman attached to malleable knife head. A, locking lever of pitman; B, knife head ball. Lower view shows side of automatic pitman open for disconnection from knife head. A, locking lever; B, spring that holds pitman in adjustment.*



*Illust. 9—The McCormick-Deering mower with the right wheel removed. A, tension spring; B, tilting lever; C, foot lift lever; D, gag arrangement.*

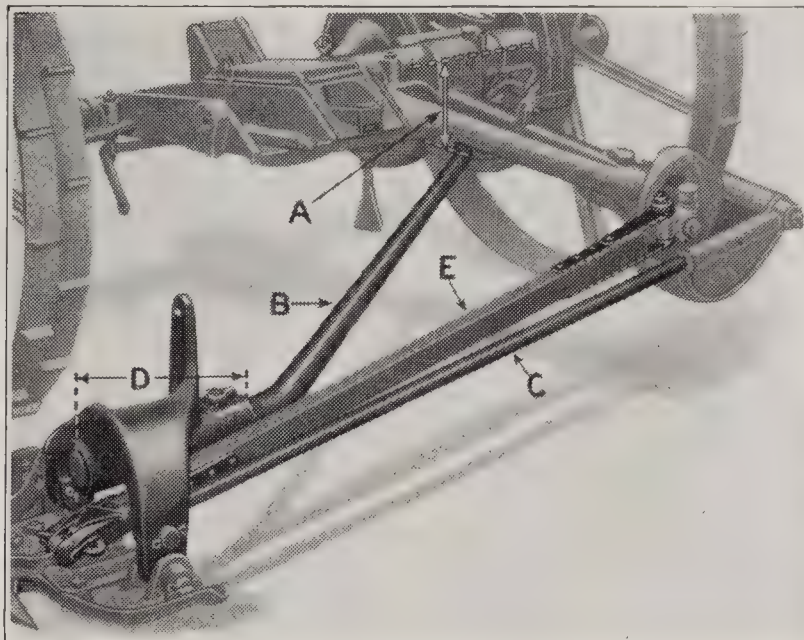
### Automatic Pitman

A feature of the McCormick-Deering mower is the automatic adjustment of the pitman straps to the knife head. In Illust. 8, Fig. 2 shows the straps open ready to receive the ball on the knife head, while Fig. 1 shows the pitman attached to the



*Illust. 10—Renewable bushings at A and C mean long wear and easy repair. B, is an adjustable ball thrust bearing. E, bevel pinion. D, washer and cotter pin.*

knife head. To remove the pitman, the lever, A, is pulled up, and to close it on the knife head, it is pushed down. The spring, B, holds the straps firmly about the ball and automatically takes up all end play and wear. This feature eliminates knocking due to end play that is so often found in ordinary mowers.



*Illust. 11—The push bar, B, is located low; the distance, A, is about 6 inches. C, draw-bar; E, pitman; D, long push bar bearing.*

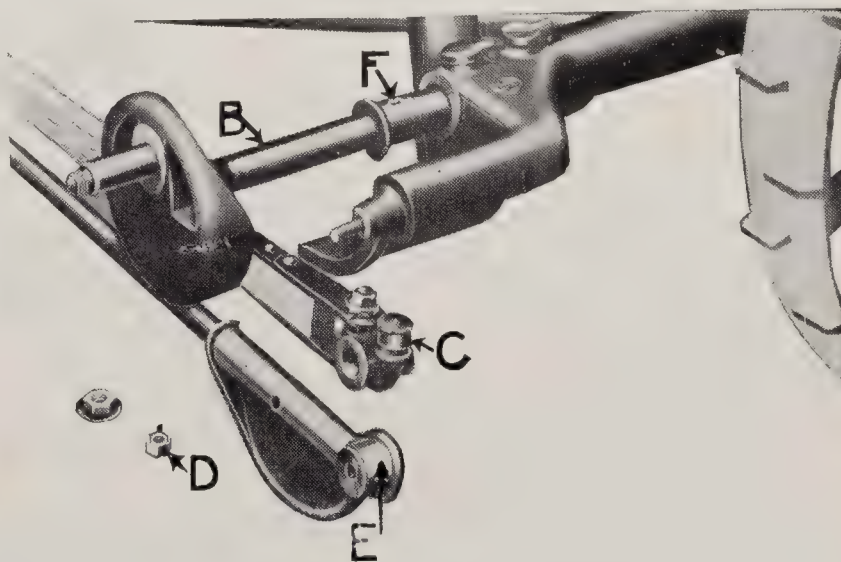
The pitman is made of thoroughly seasoned, second-growth hickory. It is light and strong. The pitman is long, which gives better action to the knife.

### A Light-Draft Mower

Among the many reasons why the McCormick-Deering mower is light draft, is the mechanical arrangement for raising and lowering the cutter bar. It is so made that the cutter bar may be raised to its highest position without changing the angle between the pitman and the knife to any great extent.

### Countershaft Bearings

The countershaft (C and A, Illust. 10) has long bearings at each end that assist in keeping proper mesh of the gears at all times.



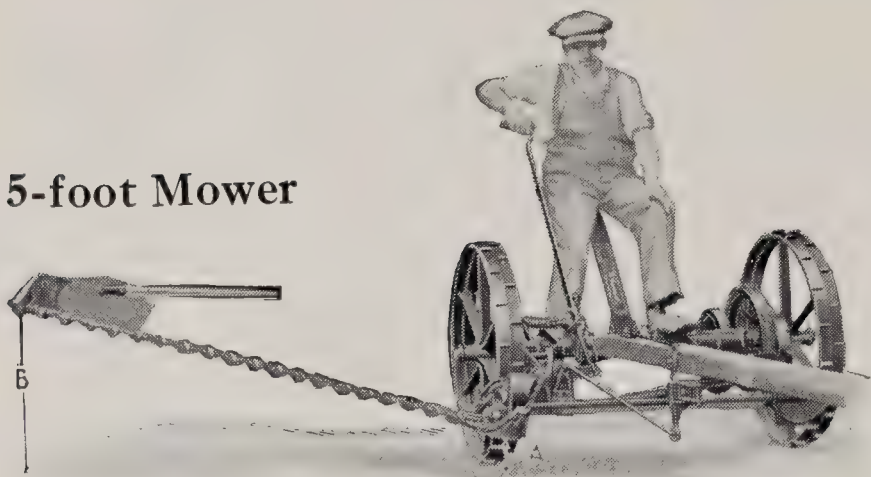
*Illust. 12—Removing and replacing the bearings on the fly-wheel shaft is the work of a few minutes. B, shaft. C, pitman. D, nuts. E, shield. F, bearing.*





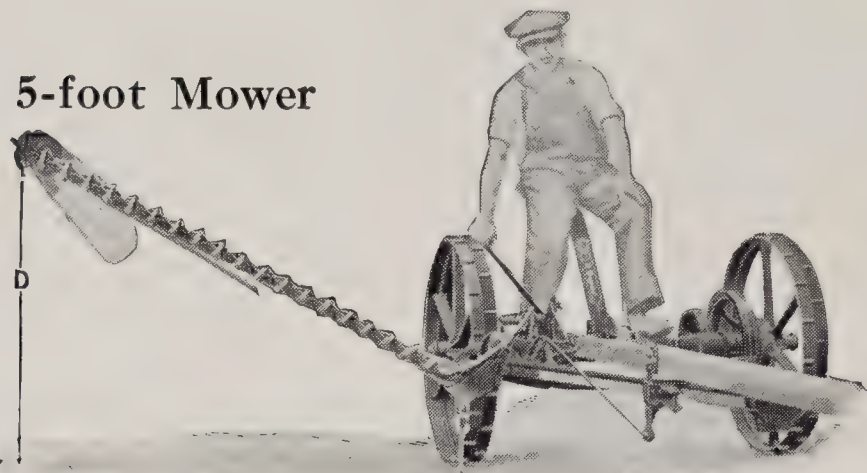
## McCormick-Deering Mowers

### 5-foot Mower



*Illust. 13—When the hand lever is in the first notch, the distance, A, is about  $8\frac{1}{8}$  inches, and B, about  $28\frac{3}{8}$  inches.*

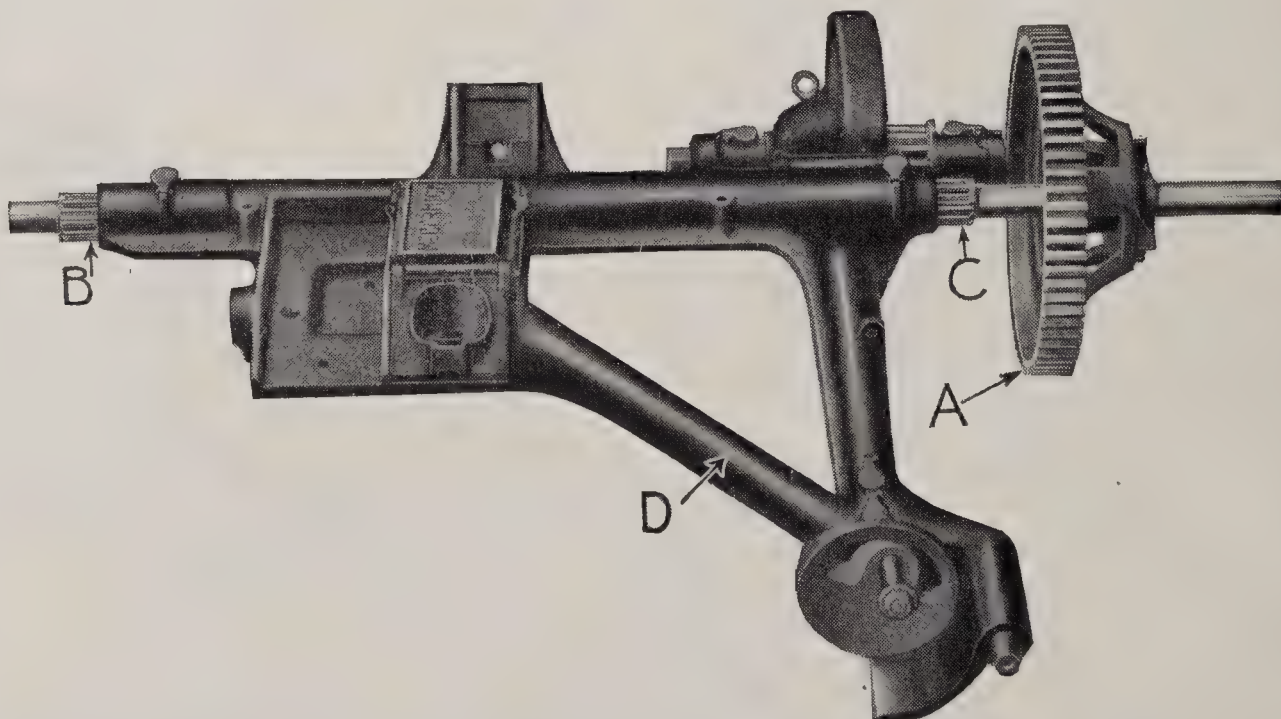
### 5-foot Mower



*Illust. 14—When the hand lever is in the second notch, the distance, C, is about 13 inches, and D, about  $44\frac{3}{4}$  inches.*

### Main Frame

The main frame on the McCormick-Deering No. 6 mower combines strength with light weight. The holes are all bored at the same time by a specially designed machine. This insures proper alignment. The frame is strong enough to hold the working parts in the right relation to each other.



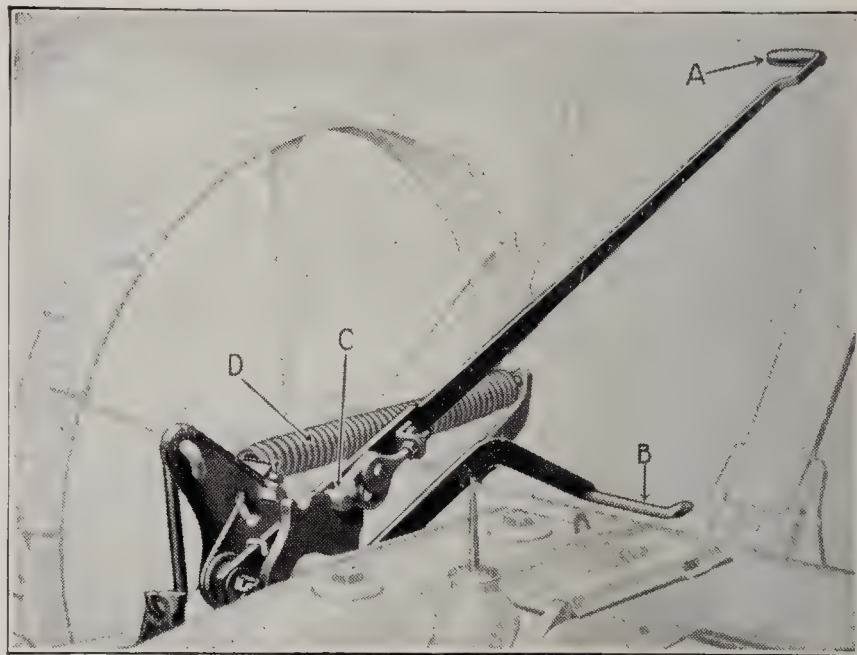
*Illust. 16—The well-made main frame of the McCormick-Deering No. 6 mower. A, large main gear; C and B, roller bearings. The flywheel shaft housing is strengthened by brace, D.*

### Pole

The pole is wide where it is fastened to the frame. The extra material is placed where it will do the most good. The tongue can be removed without disturbing any of the parts.

### A High-Lift Mower

Extremely high lift is a feature of the McCormick-Deering regular lift mowers. The cutter bar can be raised high enough to pass over most obstacles with the foot lever. If higher obstructions are encountered, the hand lever pulled back to the first notch usually raises the cutter bar high enough to pass over them. Extremely high lift can be secured with the hand lever in the second notch. This is ample for most stumpy or stony fields. But where higher lift is required the vertical lift mower should be used.

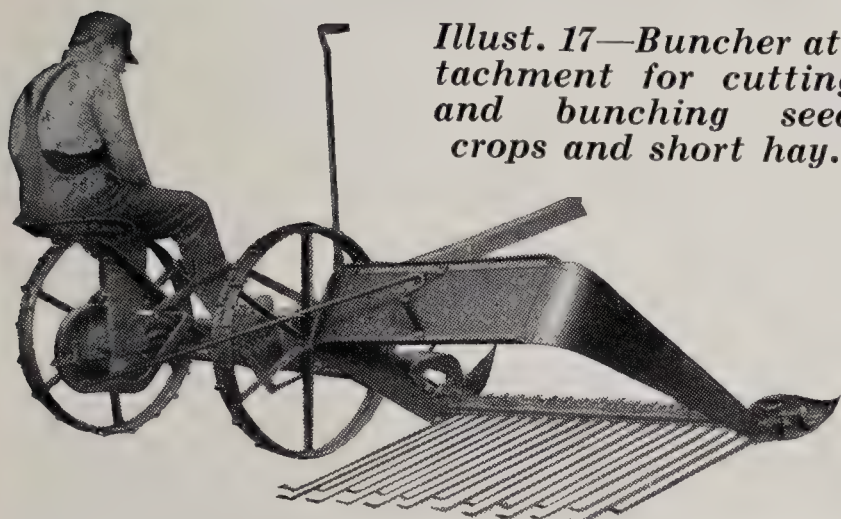


*Illust. 15—Patented raising lever has a convenient shape of handle, A. The foot lever has a wide space for the foot, B. The automatic locking device, C, holds the cutter bar in either notch. Tension spring, D, helps to raise bar.*





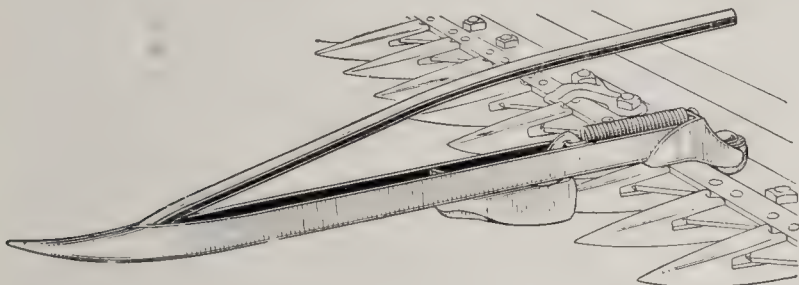
## McCormick-Deering Mowers



*Illust. 17—Buncher attachment for cutting and bunching seed crops and short hay.*

### Buncher Attachment

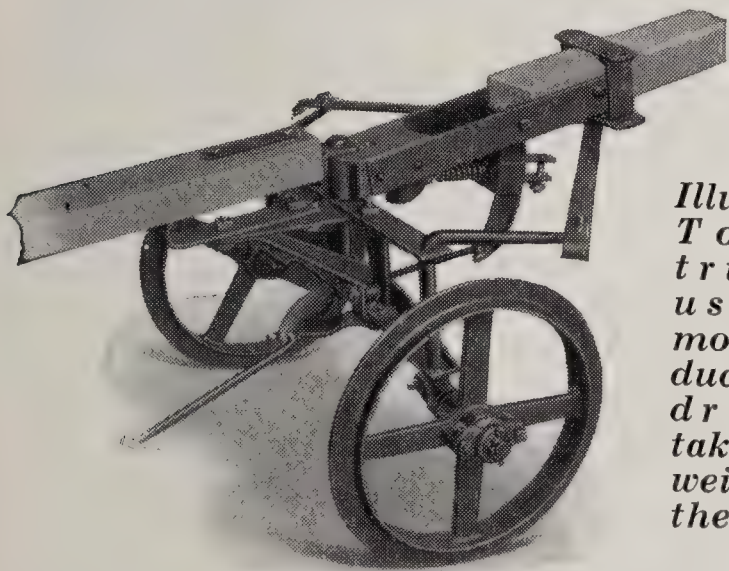
Designed for cutting short hay that cannot be raked easily. Hay is gathered on the slatted platform and dumped at will of driver by raising shield at the rear by means of a foot lever.



*Illust. 18—Grain, pea and bean vine lifters.*

### Grain Lifters

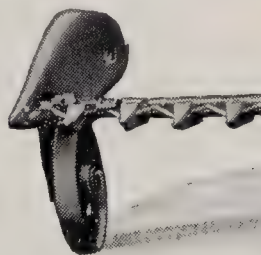
A set of grain lifters attached to a mower cutter bar will raise pea and bean vines from ground so that they can be cut at proper height. They fit over guards and attach with a single bolt. Designed to lift and pass over obstructions. Upper bar vibrates and clears itself of vines. Lifters can be used with grain binder for raising down grain.



*Illust. 19—Tongue truck for use with mower. Reduces side draft and takes neckweight off the horses.*

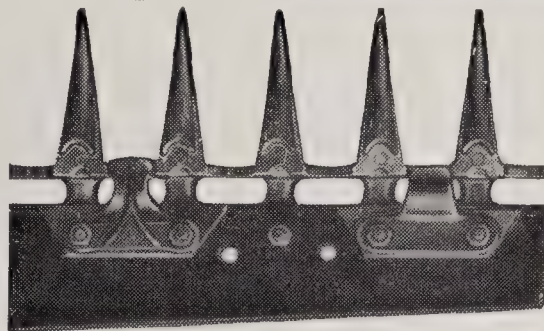
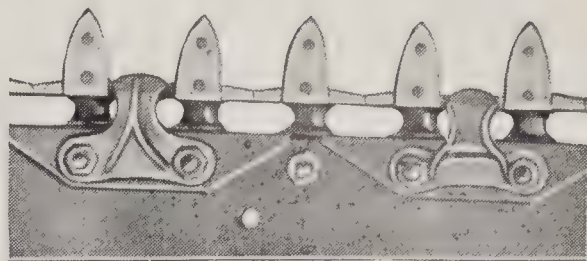
### Mower Tongue Truck

In some localities a mower gives better service equipped with tongue truck. It reduces side draft and takes neckweight off the horses. The truck illustrated is provided with a casting, permitting attachment of draft rod running from inner shoe hinge on cutter bar to tongue truck. Supplied with long pole and stub pole, or without pole, as ordered.



*Illust. 23—Weed attachment. Raises cutter bar so that weeds may be cut on stony ground or over tops of young crops.*

*Illust. 20—Section of special weed and brush cutter bar. Extra heavy guards with no lip.*



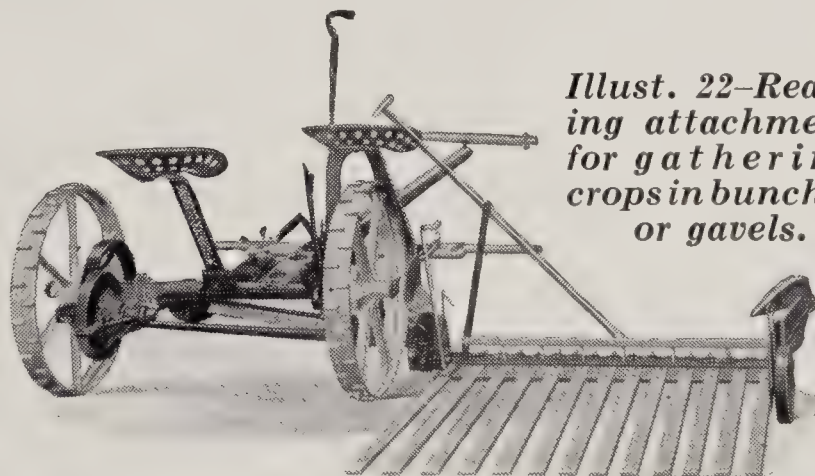
*Illust. 21—Section of "Jumbo" type guard weed bar. Useful for cutting grass, alfalfa, and peas.*

### Weed Bars

Two types of special cutter bars with heavy knives can be supplied for cutting weeds, brush, etc. The bar shown in Illust. 20 is equipped with guard without lip. Designed for cutting light brush and weeds. The bar shown in Illust. 21 has an upper lip on the guard and besides cutting weeds also cuts grass, peas, beans, and alfalfa. When cutting is hard, the 3½-foot bar is recommended with the Big 6 mower. Supplied only with 2-horse mowers.

### Reaping Attachment

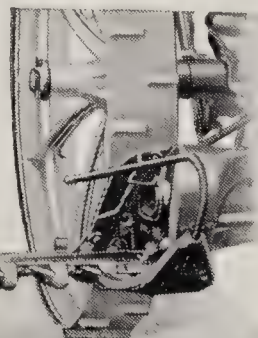
The reaping attachment for cutting grain and seed crops is supplied for 3½, 4½ and 5-foot mowers. Attachment includes an extra seat for operator who reels the crop onto the platform with a rake and retains it until a sufficiently large gavel is secured.



*Illust. 22—Reaping attachment for gathering crops in bunches or gavels.*

### Weed Attachment

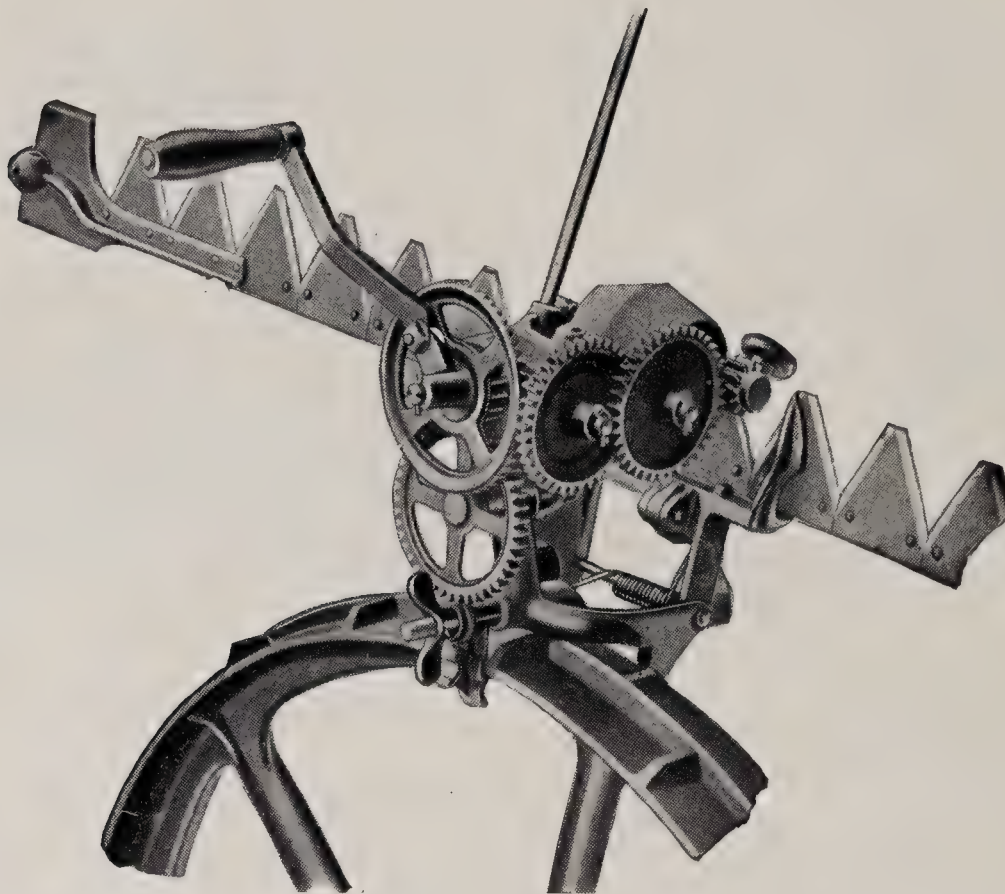
The weed attachment holds the cutter bar at sufficient height to pass over stones or young crops of grain. It consists of a hook supporting inner end of cutter bar and wheel fitting onto outer shoe. Both ends are adjustable so that the bar can be raised up to 12 inches.







## McCormick-Deering Knife Grinders



*Illust. 1—McCormick-Deering Knife Grinder.*

### Retains Correct Cutting Edge

The McCormick-Deering knife grinder was originally designed to meet the demand for an inexpensive machine with which the farmer could sharpen his mower knives easily and quickly, and still retain the correct bevel edge and cutting angle of each section. The use of a grindstone on a mower knife, unless very skillfully done, soon destroys the light draft edge originally given each section at the factory.

### Grinds Two Edges at Once

One edge of each of two sections is ground at the same time. Then the knife is moved along until the next two sections are in position. The pressure of the stone against the knife is maintained by a spring.

### Grind Knives Evenly

The knife is held firmly in the machine by clamps. By simply turning the crank the stone is revolved and moved up and down over the edges of the sections, which insures even grinding. The stone is so shaped that the correct bevel is given each section.

### Attached to Mower Wheel or Bench

The McCormick-Deering knife grinder can be attached directly to the mower wheel by means of a thumb screw, or it can be clamped to a work bench.

### Easy to Grind out Nicks

If there are nicks in a section, they can be ground out by moving the handle which extends upward

from the stone. This will move the stone up or down as desired to apply pressure at the point where the nick occurs.

### Foot Power Attachment

The McCormick-Deering knife grinder is regularly supplied for hand power. At extra cost, a stand, seat, pedals, chain, and sprocket will be supplied. The grinder is then clamped to the frame and operated from the seat by means of the foot pedals.

### Special Stone for Grinding Tools

By removing the beveled stone, a special flat stone can be fitted to the grinder. This makes an excellent machine for grinding tools.

### Special Stone for Gumming Saws

Saws can be gummed on the McCormick-Deering grinder by using a special gumming stone instead of the regular bevel stone. The saw gumming stone has a round edge especially suited for cross cut saws.

### Regular Equipment

Crank for hand power and bevel stone for grinding mower knives. Weight, including stone, 20 pounds.

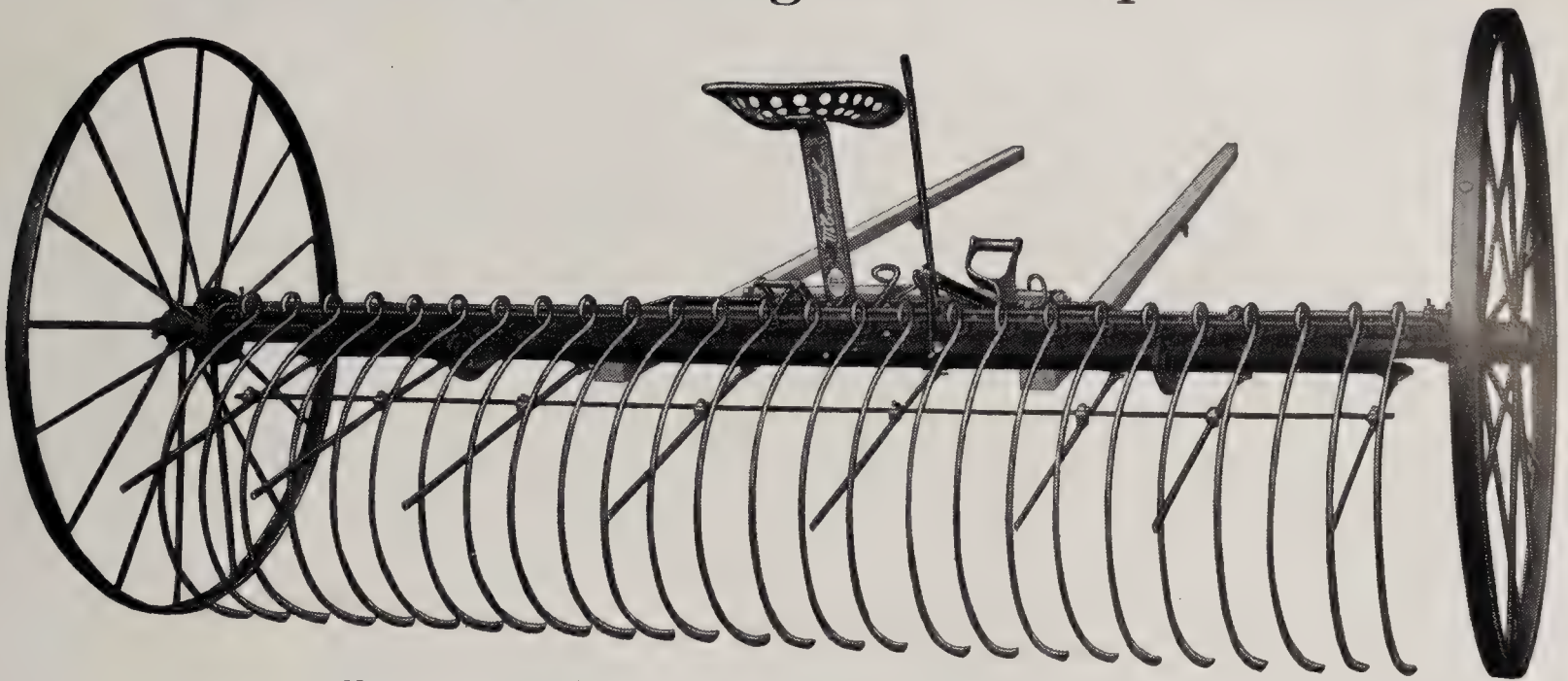
### Extra Equipment

Flat stone for grinding tools  
Saw gumming stone





## McCormick-Deering Self-Dump Rakes



*Illust. 1—McCormick-Deering Self-Dump Rake.*

### Made in Five Sizes

McCormick-Deering self-dump rakes are made in five sizes: 6½, 8, 9, 10 and 12 feet wide. Each size is built equally well and is exactly suited to the work it is intended to do. Regular and special tooth equipment is indicated in the table of specifications below. In ordering, indicate the size and state if regular or special tooth equipment is wanted.

### Steel Construction Throughout

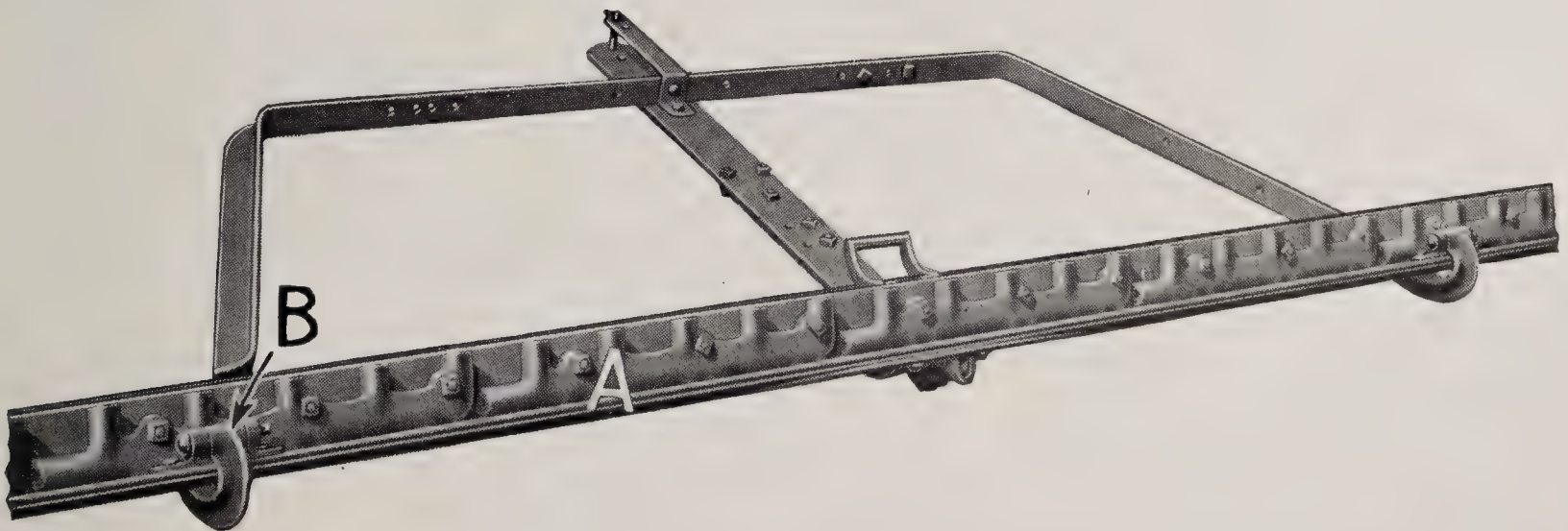
The McCormick-Deering rake is made of steel throughout. It is built so strongly that it will stand up successfully under the roughest usage and the hardest work to which it may be subjected. The best angle steel is used in construction of the frame and the different parts are put together in a substantial manner.

### A Simple, Sturdy Rake

The rake can be dumped by hand, if desired, or automatically by pressing a foot lever. The teeth are held in place by special clamping devices holding three or four teeth, but a single tooth can be removed by loosening a clamp. The thills are so arranged that they can be brought together at the center and used as a tongue for hitching two horses.

### Durable Steel Wheels

The hub, spokes and rim of the wheels are made of steel to give the wheel practically a one-piece construction. Bushings in the hubs are removable and can be replaced easily when worn. The wheels have flanges which give great strength to the rim and prevent twisting.



*Illust. 2—Frame is built of angle steel and has ample strength.*

### Specifications—McCormick-Deering Self-dump Rakes

Width	No. Horses	No. of Teeth	
		Reg.	Weight
6½-ft.	1 or 2 horses	24	368 lbs.
8 -ft.	1 or 2 horses	25	380 lbs.
9 -ft.	1 or 2 horses	30	428 lbs.
10 -ft.	1 or 2 horses	32	437 lbs.
12 -ft.	1 or 2 horses	40	500 lbs.

### Regular Equipment

⅜-inch teeth with single coil  
Thills which can be made into tongue  
Guard teeth

### Extra Equipment

½-inch teeth  
⅜ or ⅞-inch double coil teeth  
Round, flat pointed teeth  
Doubletrees and neckyoke





## McCormick-Deering Side Rake and Tedder



*Illust. 1—McCormick-Deering Roller-Bearing Side Rake and Tedder.  
Two Caster Wheels are regular.*

### Rakes or Teds

This machine is instantly convertible from a side rake to a tedder, by changing the direction in which the reel revolves. One lever controls the direction of the reel, another lever controls the slant of the teeth, either backward or forward.

### Left Hand Delivery

In following the mower, the hay is placed upon clean stubble, not upon an unraked swath. The teeth work against the heads of the hay, catching in the crotches between the leaves and stems, and raking clean. Six roller bearings make this rake exceptionally light in draft.

### Strongly Built

Note the angle steel frame, the rigid bracing including the large truss beam running over the reel, the extra heavy gears, heavy piping for reel shaft and tooth bars, etc. The main axle is solid steel. A lever at the driver's right hand advances or retards the points of the teeth, either when raking or tedding.

### Reel Ends Raised or Lowered

A lever at the left of the driver controls the height of the rear end of the reel from the ground, and a lever at the right controls the height of the front end. Thus the two ends are controlled independently of each other—quite necessary with varying conditions of hay and ground.

### Teeth Closely Spaced

The teeth are  $3\frac{3}{4}$  inches apart—close enough to sweep the stubble clean. They are oil-tempered and very flexible, and being coiled three times around the rake bars act as snubbers, taking the strain off the bolts by which they are attached in pairs. The stripper rods between which they pass are closely spaced, preventing the hay from winding or tangling in the reel.

### Controlling Line of Draft

The pole is not rigid. The steel rod to which it is attached and braced can be slid to different positions after lifting a spring catch which holds it in place. Thus the pole can be kept in the line of draft. This is important, especially when the machine is changed from raking to tedding, or vice versa.

### Center Spider Stiffens Reel

The tooth bars will not sag, for the spider or bracket in the center of the reel holds them rigidly. The bevel drive gears and clutch are mounted directly on the main axle.

### Regular Equipment

Pole and two caster wheels.

### Extra Equipment

Neck yoke and doubletrees.

### Specifications—McCormick-Deering Side Rake and Tedder

Machine	Raking Width	Spacing of Teeth	Number Horses Required	Approx. Weight
Regular size . . . . .	7 ft. 3 in.	$3\frac{3}{4}$ in.	2	1043 lbs.





## McCormick-Deering Side Rake and Tedder

### A Strong, Light-Draft Machine

Roller bearings make this rake exceptionally light in draft. The angle steel frame is rigidly braced by a large truss beam running over the reel. The gears are extra heavy. The piping for the reel shaft and tooth bars is of ample size. The main axle is solid

Supplemental caster is regular

Caster wheel

Roller bearing

Steel cylinder

Roller bearings

*Illust. 3—Looking down on the McCormick-Deering side rake and tedder. Notice the many good features of construction.*

Roller bearing

Lever raises inside end of cylinder

Lever changes machine from rake to tedder

Lever sets teeth forward or backward

Location of pole can be changed to secure correct line of draft

Lever raises outside end of cylinder

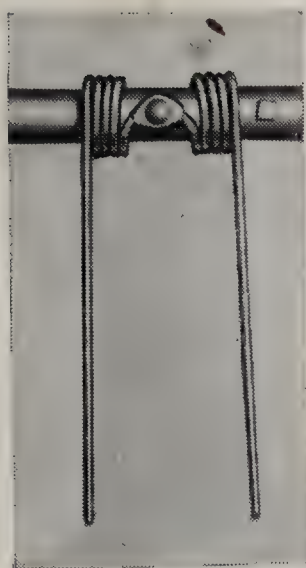
### Two Caster Wheels

Although many manufacturers make a practice of selling a supplementary caster wheel as extra equipment, McCormick-Deering side rakes and tedders are sold with two caster wheels as regular equipment. This extra wheel is a valuable factor

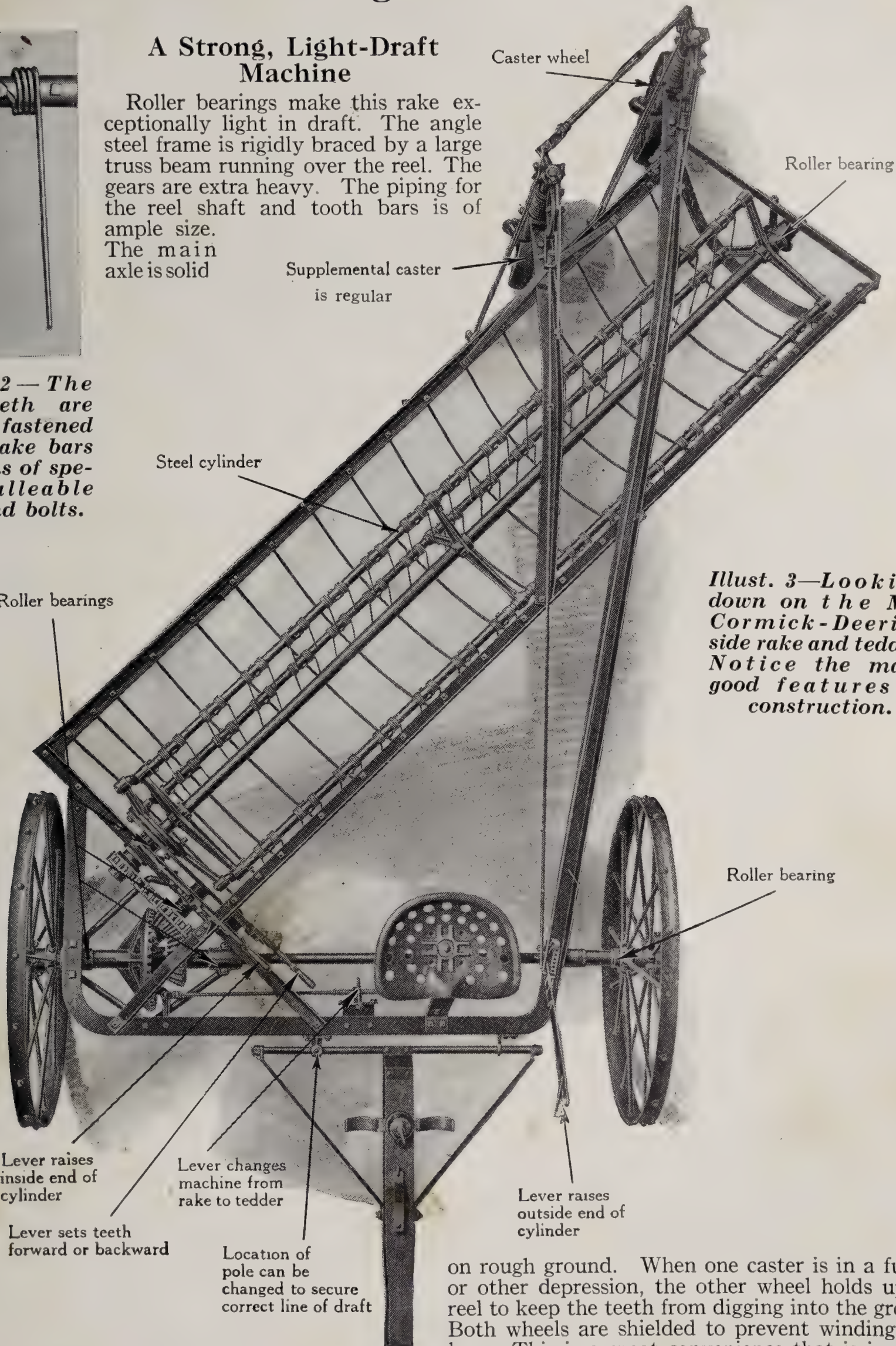
on rough ground. When one caster is in a furrow or other depression, the other wheel holds up the reel to keep the teeth from digging into the ground. Both wheels are shielded to prevent winding with hay. This is a great convenience that is included without cost to the user.

### No Stub Axle

The bevel drive gears and clutch are mounted directly on the main axle. There is no stub axle to weaken from continued use.



*Illust. 2—The rake teeth are securely fastened to the rake bars by means of special malleable clips and bolts.*





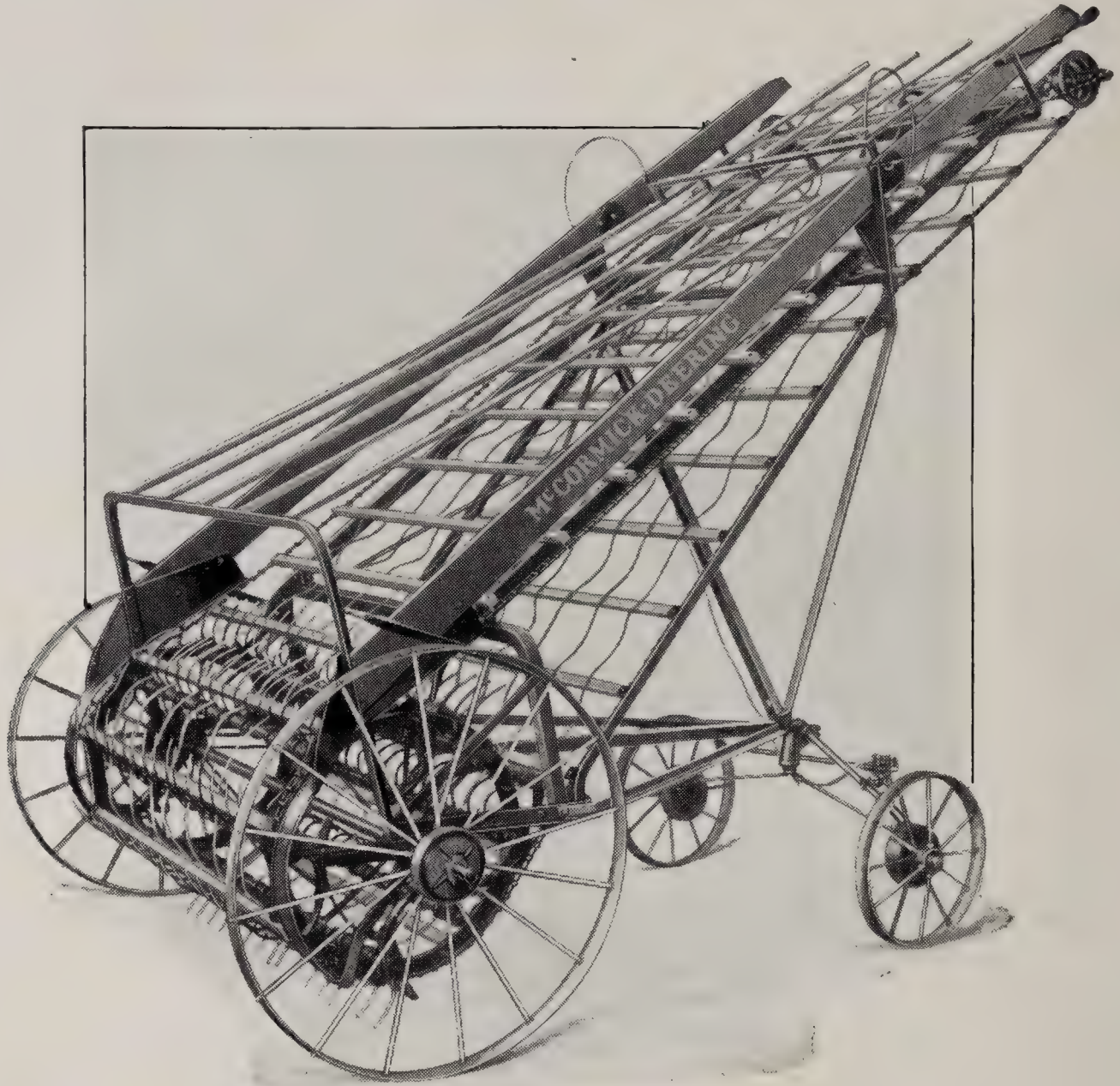


## McCormick-Deering Hay Loaders

With the carrier section raised as in Illust. 1, the hay is elevated vertically 10 feet 3 inches, and 7 feet 6 inches when the carrier is lowered.

The entire frame is made of steel and a 2-inch

high-grade solid steel axle is used. The carrier slats are extra heavy and fastened by special clips to steel drive chains. The side boards are wide and strong.



*Illust. 1—McCormick-Deering Adjustable Section Hay Loader.*

### Adjustable Carrier Section

This device, as shown in the upper part of Illust. 1, provides for lowering of the delivery end of the carrier when starting a load—handy in windy weather. As the load is built up the section is raised by turning a crank at the top. The position of the section is retained by means of a ratchet and pawl. The side boards as well as the delivery end fold, which keeps hay on the rack better and reduces the loader for storage.

### Four Roller Bearings

There are two roller bearings on the upper carrier shaft and two on the main axle.

### Regular Equipment

Forecarriage with hitching device which includes draft rod with hitching bracket, two couplers to attach to wagons, and coupler pin attached to release rope extending to top of loader.

### Extra Equipment

Windlass hitch with tongue instead of forecarriage. It includes two windlasses for attaching to wagons, coupler pin, release rope extending to top of loader, and automatic stand for holding loader upright after it has been detached.

A gleaning cylinder attachment can also be had on special order.

## Specifications

Description	Windrow Loader
Width of ground covered.....	6 feet
Height hay is elevated.....	10 feet 3 inches
Number of horses required.....	2
Number of tooth bars—main cylinder.....	8
Number of teeth per bar—main cylinder.....	16
Number of tooth bars—gleaning cylinder.....	3
Number of teeth per bar—gleaning cylinder.....	16
Weight with forecarriage.....	915 lbs.
Weight without forecarriage.....	827 lbs.

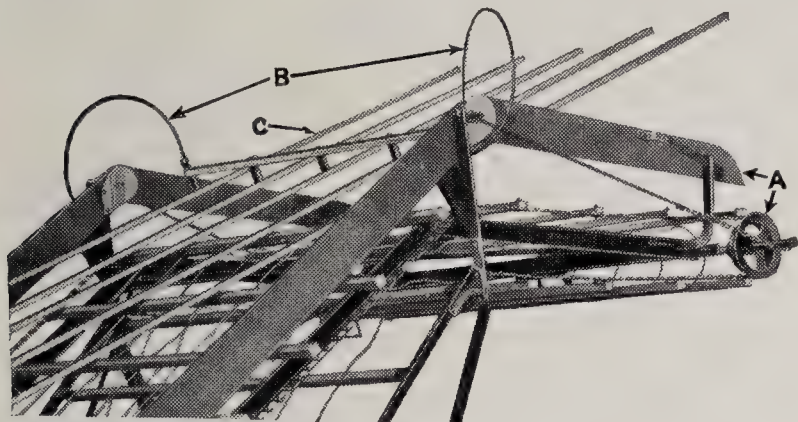




## McCormick-Deering Hay Loaders

### Builds High Loads

With the carrier section raised as in Illust. 1, the hay is elevated vertically 10 feet 3 inches, and 7 feet 6 inches when the carrier is lowered as in Illust. 2.



*Illust. 2—Adjustable section of the carrier A, lowered for starting the load. Notice that the sideboards drop as well as the delivery end of the loader. The springs B hold the compressor slats C in place, so that the wind will not blow them over backward.*

### Exceptionally Substantial Loader

The entire frame is made of steel and a 2-inch high-grade, solid steel axle is used. The carrier slats are extra heavy and fastened by special clips to malleable iron drive chains. The side boards are wide and strong.

### Gleaning Cylinder

A gleaning cylinder as shown in Illust. 3 can be attached to the adjustable section loader on special

order, making a double cylinder hay loader. This device is useful in picking up very short hay. It is quickly attached to the machine and easily adjusted to the right height above the ground.

### Saves Time and Annoyance

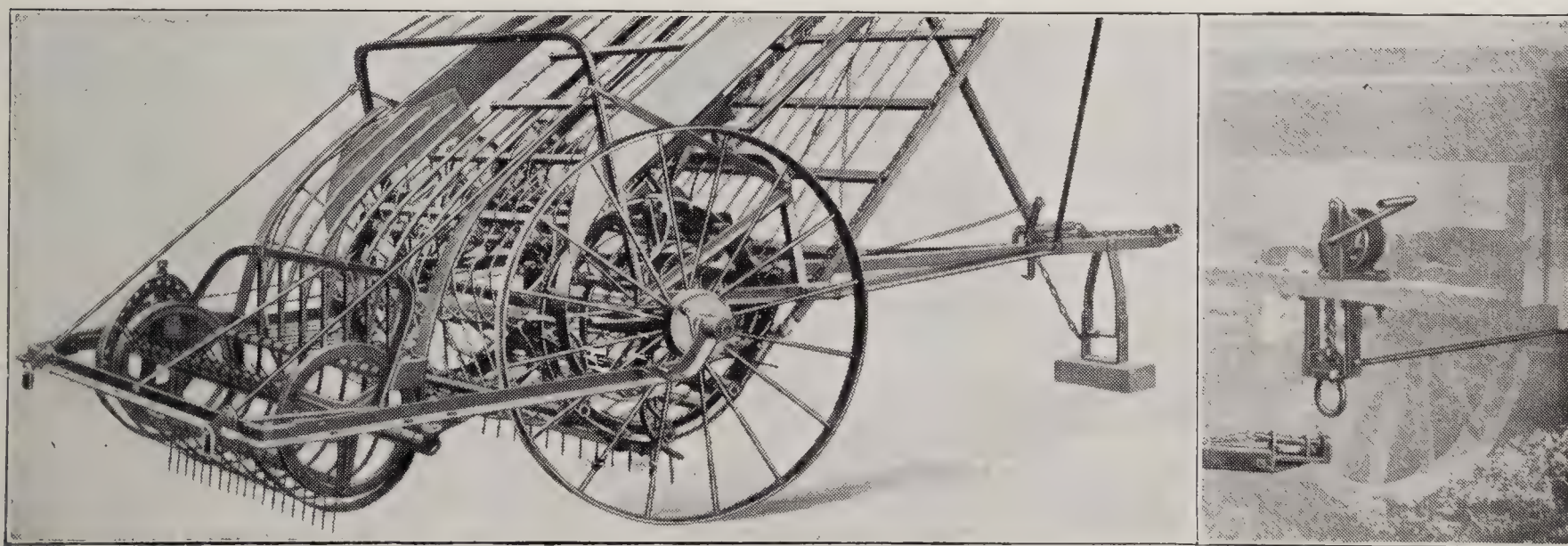
The adjustable carrier section, shown in Illustration 2 on this page, permits the delivery end of the loader to be lowered about three feet. Thus when starting to load hay on a windy day with the gale sweeping across the rack, the hay is delivered directly to the man on the wagon where he can catch it before the wind has a chance to blow it off. As the load is built up, a few turns of the crank which is placed at the upper end will raise the adjustable section to any point desired, until it is in line with the lower section. Changing the angle of the upper section does not loosen the chains on the carrier or cause any part of the mechanism to bind. It is a great convenience that will be appreciated by any farmer who puts up hay during windy weather.

### Forecarriage

The forecarriage is regularly supplied with the single cylinder loader. Its wheels are equipped with shields to prevent hay from winding.

### Unhitched from Top of Loader

The man on the load pulls a rope extending from the top of the loader to a latch, either on the forecarriage or the special hitch, and disconnects the loader from the hay rack.



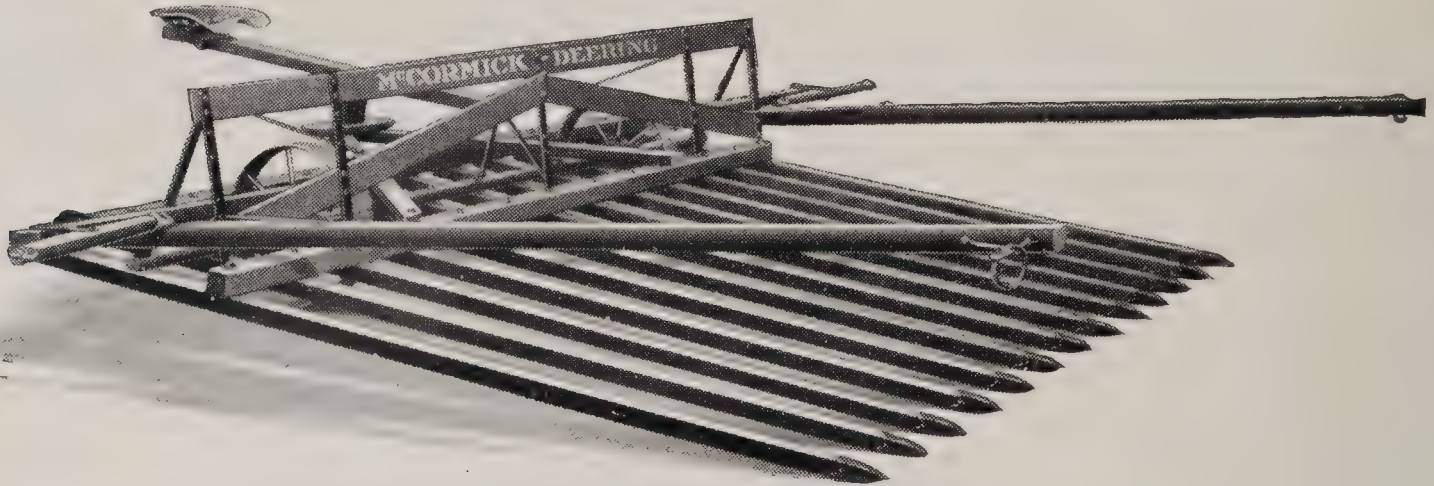
*Illust. 3—The addition of the gleaning cylinder to the single cylinder loader shown in Illust. 1 makes a double cylinder loader. Gleaning cylinder can also be supplied at extra cost for single cylinder loader already in use.*

*Illust. 4—Windlass hitch special on wind-row loader. Regular on double cylinder loader.*





## McCormick-Deering Sweep Rakes



*Illust. 1—McCormick-Deering Sweep Rake No. 1-B.*

### Made in Three Styles

McCormick-Deering sweep rakes are made in 2, 3 and 4-wheel types. All types have continuous steel axles and convenient devices for adjusting the height of the teeth from the ground. They will carry 600 to 700 pounds of hay, rake clean, are easy to operate and light in draft. Rakes Nos. 1-B and 2-A are of the side-hitch type, and rake No. 4-B is of the rear-hitch type.

### Durable, Metal-Tipped Teeth

Teeth are of straight-grained yellow pine, metal-tipped and interchangeable. The teeth can be placed close to the ground for raking from the swath by turning them upside down. Teeth with turned-up points for use on soft ground, where regular points would dig in, may be had on order.

### Sweep Rake No. 1-B

Rake No. 1-B has hinged or floating poles. Wheels and axle are mounted in the rear to secure proper balance and desired weight on teeth. Teeth are adjusted by sliding the seat back and forth. Truss rods extending from runners to ends of upper sill make strong construction and prevent the side teeth from sagging.



*Illust. 2—McCormick-Deering No. 4-B Sweep Rake. Power-lift type.*

### Sweep Rake No. 2-A

This rake is of the 3-wheel type and has a frame similar to rake No. 1-B. The seat is mounted on a rear truck and has a lever tooth control with pressure spring. The poles are hinged and horses can be backed without raising teeth.

### Sweep Rake No. 4-B

This rake is of the 4-wheel rear-hitch type provided with power lift. The horses are hitched back of the rake head. A lever conveniently located controls the position of the teeth. Pressure springs are also provided which permit the teeth to be firmly held against the ground and at the same time to spring up over obstructions, thus preventing breakage. This is a very popular rake in irrigated sections and on large alfalfa ranches.

### Extra Equipment

Special teeth with turned-up points for soft ground. Ditch jumper attachment for No. 4-B rake.

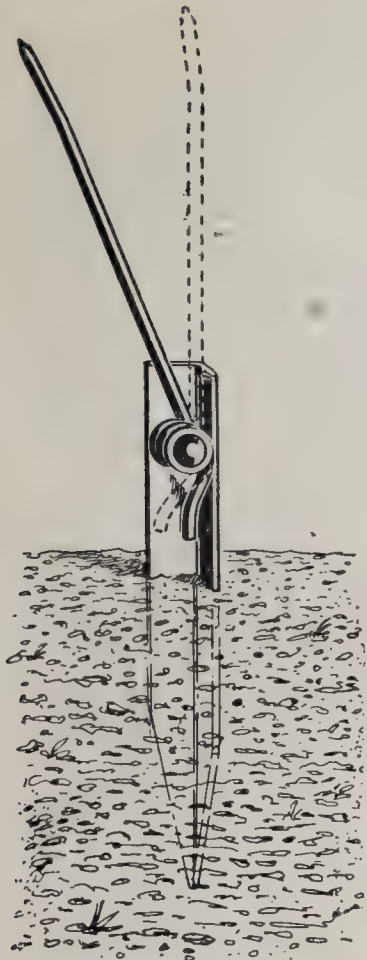
### Specifications—McCormick-Deering Sweep Rakes

Rake No.	Extreme Width of Platform	Spacing of Teeth, Center to Center	Diameter, Main Wheels	Diameter, Caster Wheels	Weight
1-B	12 feet 4 inches	12 inches	20 inches	None	500 lbs.
2-A	12 feet 4 inches	12 inches	20 inches	17 inches	675 lbs.
4-B	12 feet 4 inches	12 inches	20 inches	17 inches	745 lbs.
Ditch jumper attachment for No. 4-B rake.....					15 lbs.
Special teeth with turned-up points (13 to a set), each.....					10½ lbs.

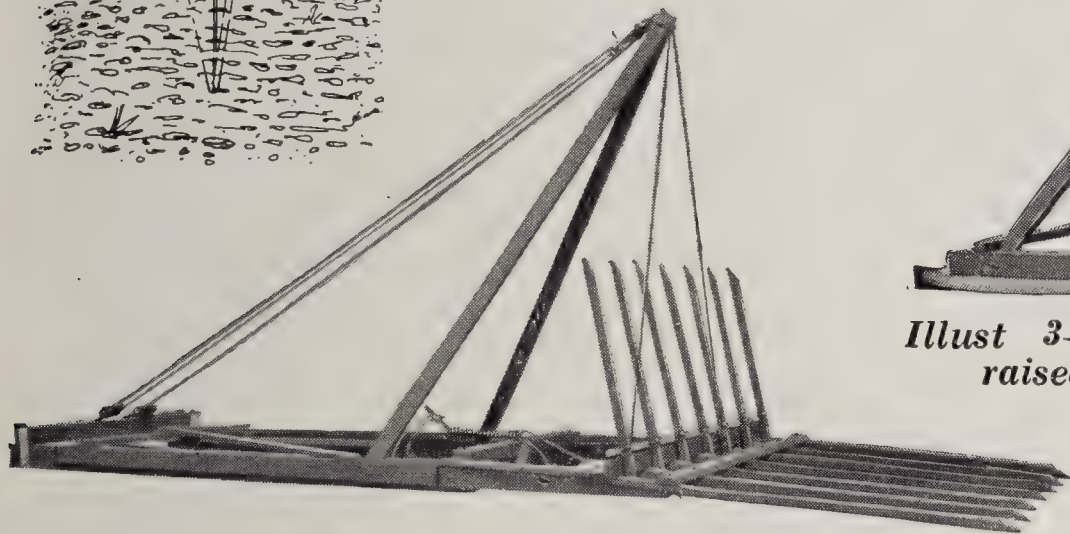




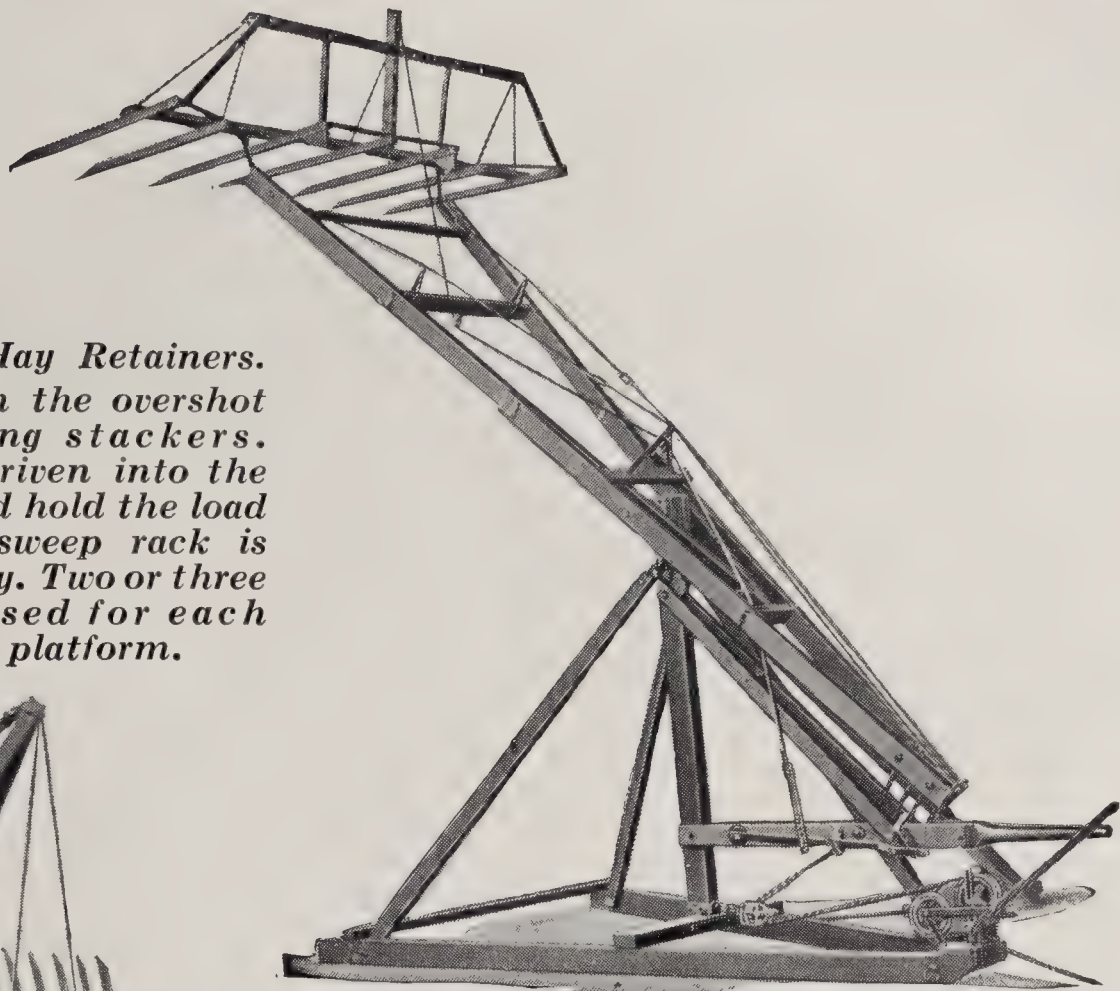
## McCormick-Deering Hay Stackers



*Illust. 1—Hay Retainers.  
Used with the overshot  
and swinging stackers.  
They are driven into the  
ground, and hold the load  
when the sweep rack is  
backed away. Two or three  
usually used for each  
stacker platform.*



*Illust. 2—McCormick-Deering Overshot Stacker with  
platform lowered to receive load.*



*Illust. 3—Swinging Stacker with platform  
raised to full height—25 feet 6 inches.*

### McCormick-Deering Overshot Stacker

The height from the ground of the pitcher teeth of the overshot is adjustable from 16½ to 18½ feet, making it possible to build a stack of this height without forking the hay above the level of the pitcher teeth. However, a higher stack may be made by forking the hay off from the stacker and building the stack above the level of the pitcher teeth.

#### Draft Same at All Points of Altitude

The A frame which controls the pitcher head prevents sagging and makes the draft practically the same at all times. A heavy cable keeps the pitcher head from going over too far and the spring pulls it over the center so that it will fall into position for the next load.

### McCormick-Deering Swinging Stacker

The swinging feature permits depositing the hay in a circle on the stack, eliminating much forking. Builds stack 22 feet high. On special order, a high lift attachment can be had which gives the 25-foot 6-inch elevation.

#### Regular Equipment

Overshot stacker; cables, draft rope, springs, retarding links, stakes and driving sledge.

Swinging stacker; cables, draft rope, friction brake, driving sledge and stakes.

#### Extra Equipment

Overshot stacker; transport trucks, hay retainers. Swinging stacker; transport trucks, high lift attachment and hay retainers.

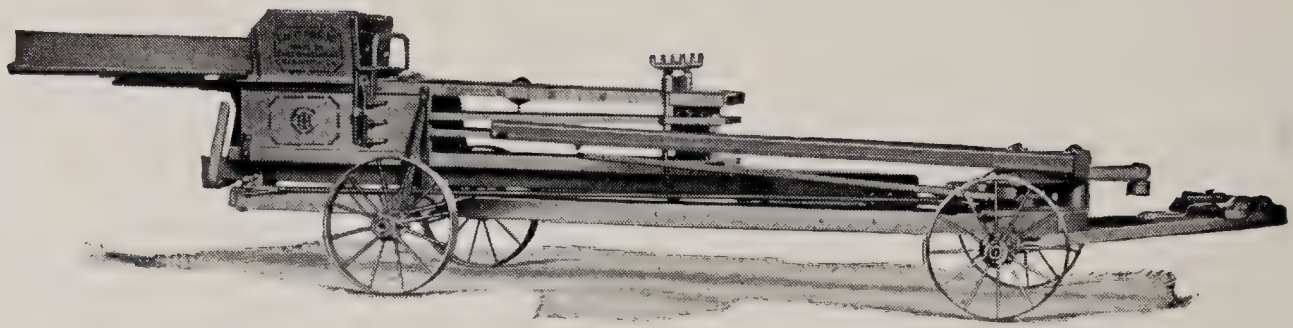
### Specifications—McCormick-Deering Hay Stackers

	Overshot Stacker	Swinging Stacker
Extreme width of platform.....	148 in.	148 in.
Height of pitcher teeth.....	16½ to 18½ ft.	22 to 25½ ft.
Total length of rake teeth.....	105 in.	106½ in.
Total length of vertical teeth.....	62 in.	.....
Spacing of teeth (center to center).....	24 in.	24 in.
Weight.....	1005 lbs.	1525 lbs.
Attachments: High lift attachment—weight.....	.....	97 lbs.
Transport—weight.....	95 lbs.	95 lbs.
Hay retainers (in sets of 2 or 3) weight, each.....	9 lbs.	9 lbs.





## McCormick-Deering Hay Presses



*Illust. 1—McCormick-Deering One-horse Hay Press, telescoped for transportation.*

### Convenient to Feed

Feed tables can be placed on either side or back of feed opening. Large steel hopper with extension can be used on either side. Bed reach is long enough to allow bale chamber to be set back in barn to feed from mow, with ample room for sweep and horses outside.

### Greatest Power at End of Stroke

The plunger is operated by toggle joints, compounding the power enormously. The power arrangement of the sweep increases the leverage as the rollers move outward on the power arms, likewise the straightening out of the toggle joint links in the bale chamber produces the greatest power at the end of the plunger stroke. A pull of 500 pounds on the sweep gives a pressure of about 76,800 pounds upon the plunger.

### Low Step-over

With bed reach resting on the ground, the horses do not have to step more than  $4\frac{1}{2}$  inches high, thus they do not hesitate at this point.

### Regular Equipment—One-horse Press

Transport trucks complete with pole, double-trees and neckyoke, sweep with guide stick for horse, two stakes, sledge, feeder's platform, feeding fork, three division blocks and signal bell.

### Extra Equipment—One-horse Press

Lifting jack, bale tie maker, extra blocks.

### Regular Equipment—Two-horse Press

Transport trucks complete with pole, double-trees and neckyoke, sweep with guide stick for horses, two stakes, sledge, lifting jack, pan block setter on the 14 by 18 and 16 by 18-inch presses, feeder's platform and feeding fork (when self-feed is not ordered), three division blocks, and signal bell.

### Extra Equipment—Two-horse Press

Self-feeder, bale tie maker, extra blocks.



*Illust. 2—McCormick-Deering Two-horse Hay Press set for work.*

### Specifications—McCormick-Deering One and Two-horse Hay Presses

	Size Bale Chamber	Size Feed Opening	Approx. Capacity, 10-hr. Day	Approx. Weight of Bales	Length of Sweep	Weight with Hand Feed	Weight with Self Feed
1-Horse.....	14 by 18 in.	14 by 22 in.	6 to 8 tons	50 to 80 lbs.	9 ft.	2011 lbs.	Not. furn.
2-Horse.....	14 by 18 in.	14 by 28 in.	7 to 9 tons	60 to 90 lbs.	10 ft. 10 in.	3742 lbs.	4063 lbs.
2-Horse.....	16 by 18 in.	16 by 28 in.	9 to 11 tons	75 to 110 lbs.	10 ft. 10 in.	3824 lbs.	4132 lbs.
2-Horse.....	17 by 22 in.	17 by 28 in.	11 to 13 tons	90 to 120 lbs.	10 ft. 10 in.	3963 lbs.	4208 lbs.

Lifting Jack: (Regular with 2-horse press, special with 1-horse press). Weight, 54 lbs.

Ground Wheels: One-horse, 14 by 18-inch presses, 20-inch front,  $25\frac{1}{2}$ -inch rear, face 3 inches; truck tread, 37 inches. All 2-horse presses: 30-inch front and rear, faces 4-inch; truck treads, 58-inch.

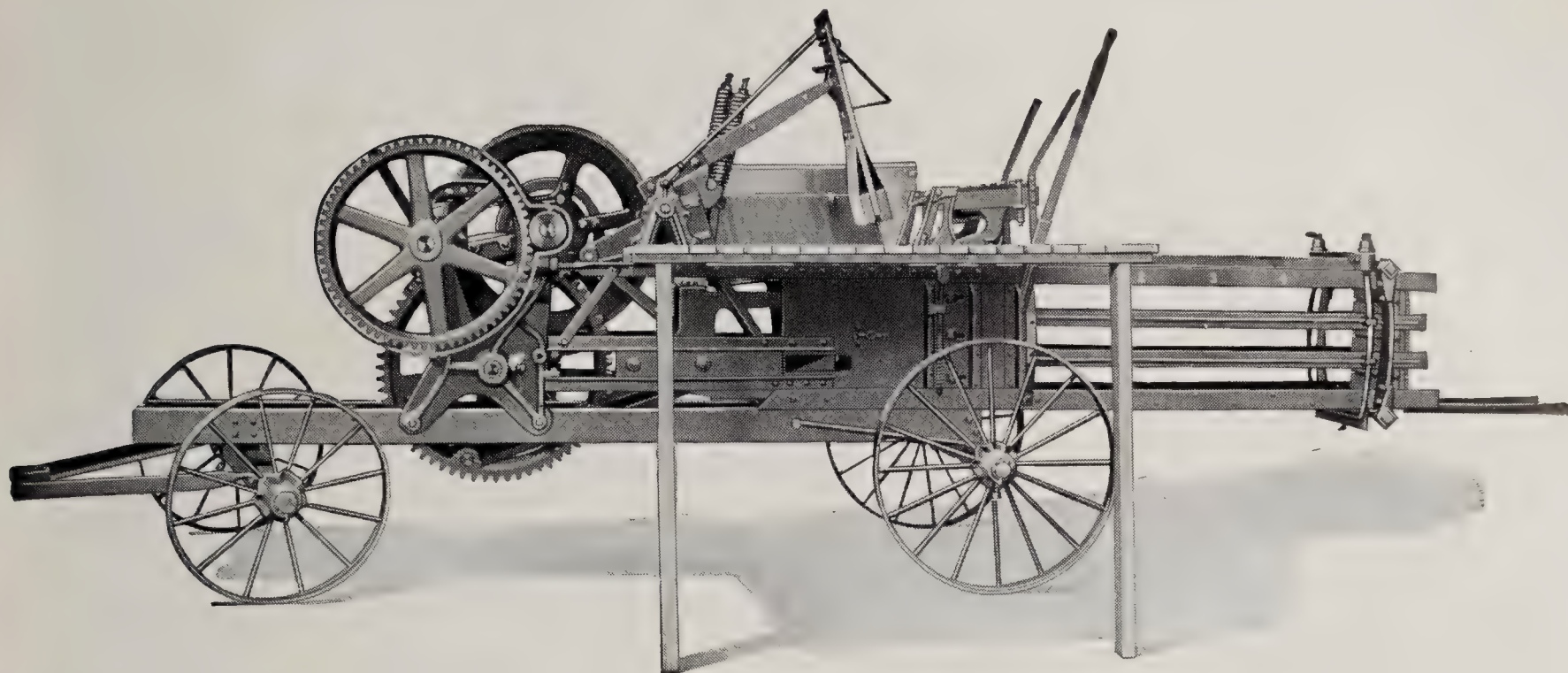
Stepover:  $4\frac{1}{2}$  inches high—all horse presses.

Attachments: Bale tie maker (makes wire ties from 6.6 to 10.6). Weight, 40 lbs.





## McCormick-Deering Hay Presses



*Illust. 3—McCormick-Deering Power Press (belted style—minus engine) ready for work.*

### McCormick-Deering Power Press— Three Sizes

The 14 by 18 and 16 by 18-inch power presses are designed to operate either as motor presses as in Illust. 4, or as belted presses as in Illust. 3. A 6 H. P. McCormick-Deering engine can be supplied for these presses on special order. Attachments for mounting engine, including clamps, belt, belt tightener, friction clutch pulley, hopper screen, special air intake excluding dust, and muffler spark arrester, can also be had on special order.

The 17 by 22-inch press is designed primarily to be operated as a belted press. See Illust. 3.

### McCormick-Deering 6 H. P. Engine

The engine supplied on order for the 14 by 18 and 16 by 18-inch presses operates on kerosene. The engine is hopper-cooled with a fuel tank in its base—a compact arrangement. It has a built-in low tension magneto—no batteries required for starting. Crank case is enclosed. Principal bearings are lubricated by grease cups.

### Regular Equipment—Power Press

Plain pulley, 18 by 7½-inch, four division blocks, self-feed, block setter, trucks, flywheel brake, slatted feed table, hopper with extension, bale chamber extension and seat.

### Extra Equipment—Power Press

McCormick-Deering 6 H. P. engine and 18 by 6½-inch friction clutch pulley for same, for mounting on the 14 by 18 and 16 by 18-inch presses; also the following package of parts: Pulley belt, belt tightener, engine clamps, engine hopper screen, muffler spark arrester, and air intake screen. Plain pulleys—10, 12, 14 and 16-inch, brake for truck wheels, bale tie maker, solid bottom feed table and combination horse and tractor hitch for all three sizes. 6-inch tires on transport wheels, instead of 4-inch. 26½-inch front transport wheels. Extra wide claw extension for feeder board for alfalfa and short prairie hay.

### Specifications—McCormick-Deering Power Press

Size Bale Chamber	Size Feed Opening	Approx. Capacity, 10 hr. Day	Approx. Weight of Bales	Speed of Engine R. P. M.	Speed of Press Flywheel	Weight Without Engine	Weight With Engine	Width, Outside Bed Angles
14 by 18 in.	14 by 25 in.	15 to 20 tons.	60 to 100 lb.	550	500 to	4521 lbs.	5353 lbs.	16½ in.
16 by 18 in.	16 by 25 in.	20 to 24 tons.	70 to 125 lb.	550	650	4596 lbs.	5428 lbs.	16½ in.
17 by 22 in.	17 by 25 in.	24 to 30 tons.	100 to 165 lb.	Not furn.	R. P. M.	4946 lbs.	Not furn.	16½ in.

Thirty revolutions of press flywheel to each stroke of pitman—all sizes.

Ground Wheels—all sizes: Diameter front, 30 inches; rear, 36 inches; face tire, 4 inches; tread, center to center, 4 feet 8 inches. Brake for ground wheels, weight 50 lbs.

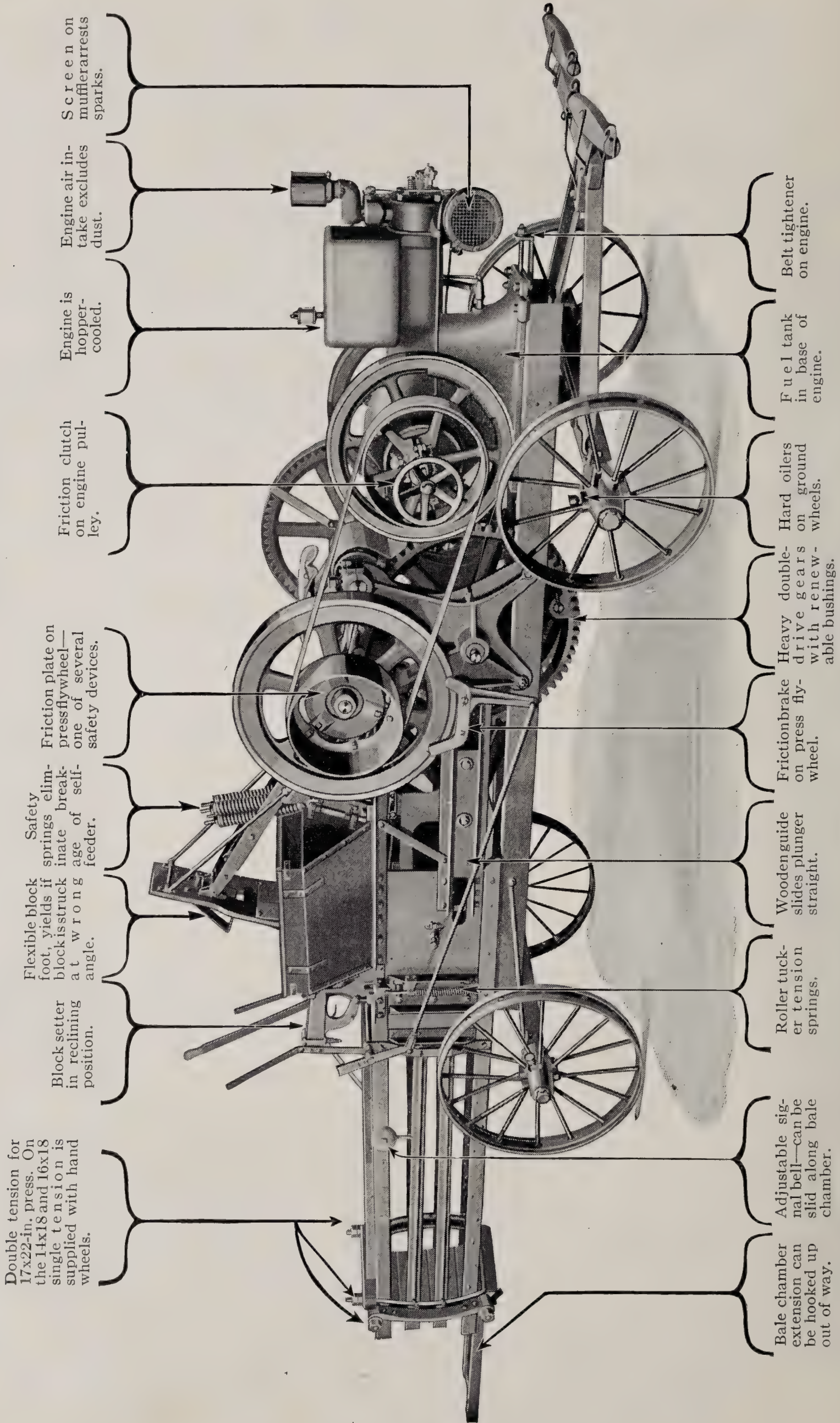
18 by 6½-inch friction clutch pulley special with 6 H.P. engine.

18 by 7½-inch plain pulley regular on press, 10, 12, 14 and 16-inch pulleys available on special order.





## The Ideal Press for Custom Baling



Double tension for 17x22-in. press. On the 14x18 and 16x18 single tension is supplied with hand wheels.

Block setter in reclining position.

Flexible block foot, yields if block is struck at wrong angle.

Safety springs eliminate breakage of self-feeder.

Friction plate on press flywheel—one of several safety devices.

Friction clutch on engine pulley.

Engine is hopper-cooled.

Engine air intake excludes dust.

Screen on muffler arrests sparks.

Bale chamber extension can be hooked up out of way.

Adjustable signal bell—can be slid along bale chamber.

Roller tucker tension springs.

Woodenguide slides plunger straight.

Friction brake on press flywheel.

Heavy double-drive gears with renewable bushings.

Hard oilers on ground wheels.

Fuel tank in base of engine.

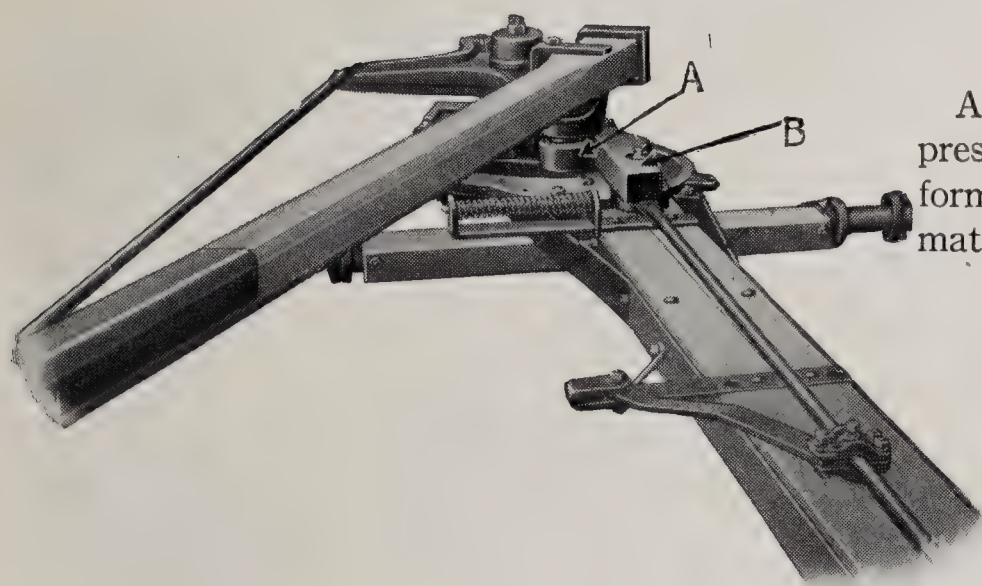
Belt tightener on engine.

*Illust. 4—Look over this illustration and see the many unusual features about McCormick-Deering power hay presses. It is the most complete equipment for a custom baler and will prove a money-maker in the hands of any ambitious man.*





## Horse Hay Presses

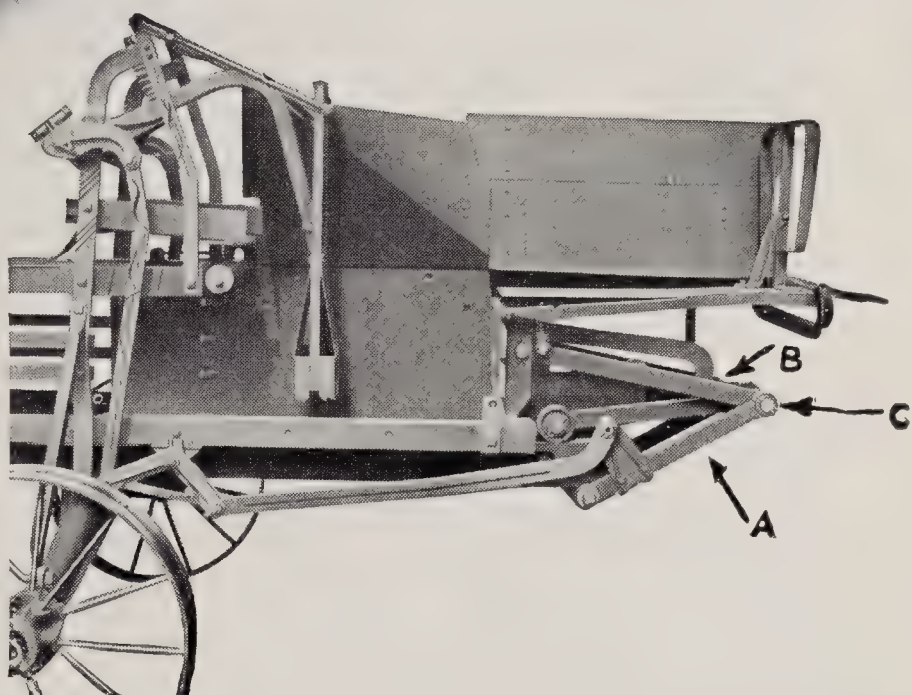


*Illust. 5—Sweep to which horses are hitched and mechanism by which power is delivered on the one and two-horse hay presses.*

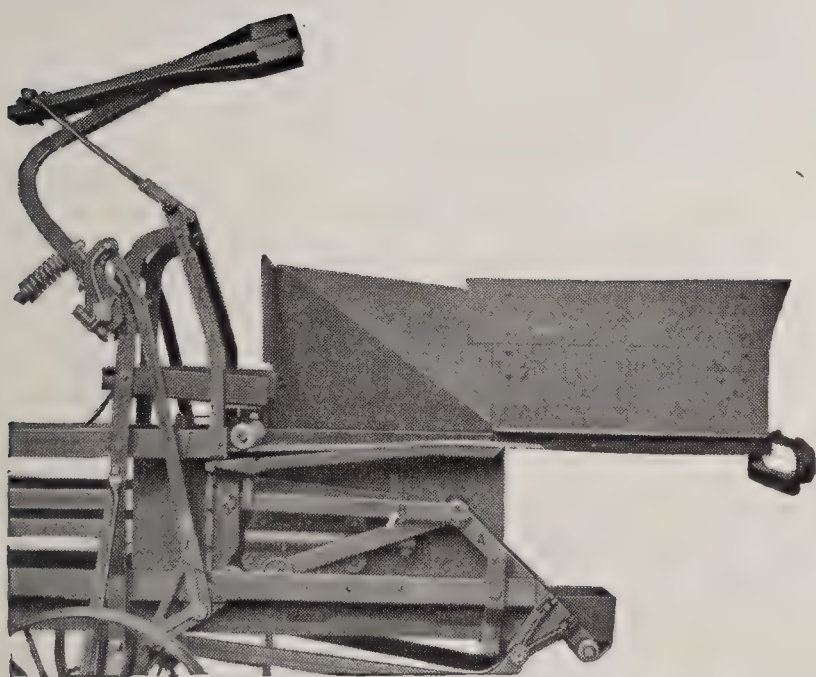
Each revolution of the sweep makes two strokes of the plunger. A pull of 500 lbs. on the end of sweep gives a pressure of 76,800 lbs. in the bale chamber. This shows how easily these presses operate, as no such pressure is ever required to make good bales. The step-over for the horses is but  $4\frac{1}{2}$  inches above the ground. The stroke of the press is completed before this step-over is reached, so the horses are not pulling against pressure at this point.

### Roller Tucker

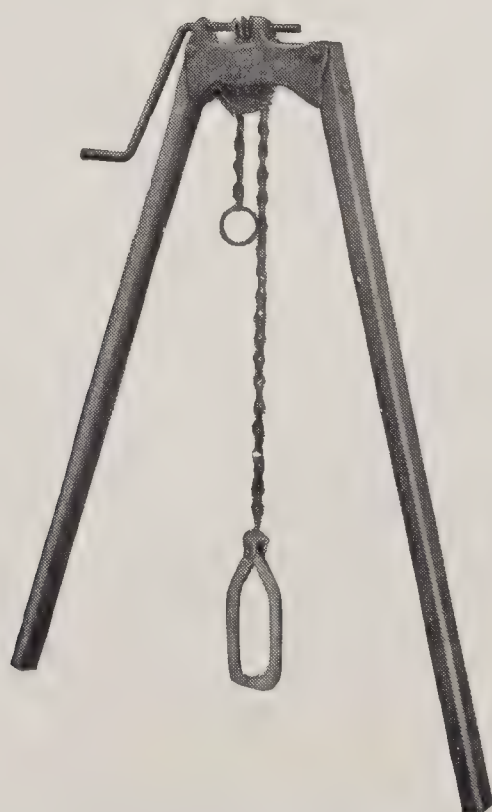
A roller tucker is provided on the two-horse presses which turns in the loose ends of the hay and forms neat bales. Its operation is entirely automatic.



*Illust. 6 — Sectional view of bale chamber showing plunger as far back as possible. The bale chamber is open to receive a charge of hay and self-feeder is shown down, in the position of carrying the charge into the bale chamber.*



*Illust. 7—Sectional view of bale chamber showing plunger just completing its forward stroke. Notice the arrangement of the levers which give greater pressure in the bale chamber with a comparatively light pull against the sweep. Notice that the self-feeder is raised at this time.*

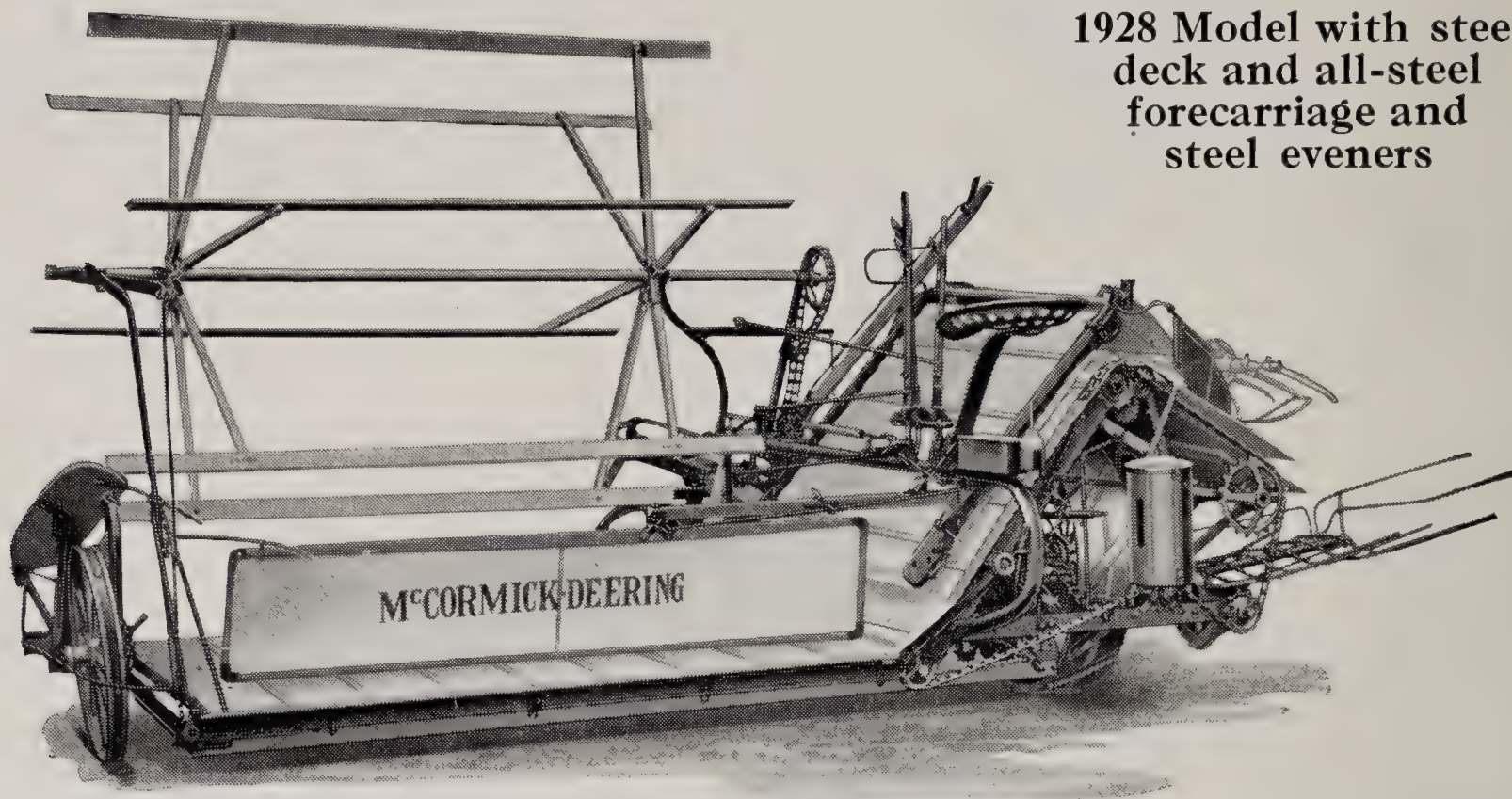


*Illust. 8—A lifting jack is supplied with horse presses for the purpose of lifting the press for removing the wheels preparatory to baling and in replacing the wheels.*





## McCormick-Deering Grain Binders



1928 Model with steel deck and all-steel forecarriage and steel eveners

*Illust. 1—McCormick-Deering 8-foot Grain Binder, a combination of the best features in McCormick and Deering binders. Built in three sizes, 6, 7 and 8-foot cuts.*

### Result of 95 Years' Experience

McCormick and Deering grain binders have a world-wide reputation for dependability under all conditions. The McCormick has a reputation for strength and ability to stand hard usage; while the Deering has long been recognized as the lightest draft machine. The combination of the best features of both machines in the McCormick-Deering means all the advantages of the sturdy McCormick construction with the best qualities of the Deering.

### Many New Improvements

A few of the improvements which make the McCormick-Deering easily the leading grain binder are listed here. Improved bevel gears with larger teeth which mesh deeper. Improved ball-thrust bearing on bevel gear shaft. Improved adjustment of ball-thrust bearing for meshing bevel gears. Ball-thrust bearings on both ends of the main wheel hub. Removable roller bearing in grain wheel. Roller bearings on both ends of main elevator driving roller. Improved self-aligning roller bearings in main frame. Vertical bolted connection between

main frame and platform. Improved connection between platform and elevator frame. Better bracing for outside reel support. More space between main wheel and main drive chain, eliminating accumulation of dirt and undergrowth. Better platform canvas adjusting device. Controlling levers easier to reach and operate. Wider range of adjustments of reel. Choice of McCormick or Deering binding attachments.

### Regular Equipment

One serrated sickle. Bundle carrier. Platform and elevator canvases. Pole, neckyoke and eveners. Outside reel support on 7 and 8-foot binders. Tongue truck on 8-foot binders. Retarding strap. Tools and oil can.

### Extra Equipment

Outside reel support on 6-foot binders. Tongue truck on 6 and 7-foot binders. Transport truck. Supplemental outside divider. Flax buncher. Heading attachment. Power-drive attachment. One-man binder control. Canvas butt adjuster. Tractor hitch.

### Specifications—McCormick-Deering Binders

Size	*Acres Cut 10 Hours	Highest Elevation of Reel	Lowest Elevation of Reel	Highest Elevation of Platform	Lowest Elevation of Platform (Slight Tilt)	Shipping Weight	
						With McCormick Binding Attachments	With Deering Binding Attachments
6-foot	15	33 inches	4 inches	18 inches	3 inches	1580 lbs.	1595 lbs.
7-foot	17	33 inches	4 inches	18 inches	3 inches	1670 lbs.	1685 lbs.
8-foot	20	33 inches	4 inches	18 inches	3 inches	1870 lbs.	1885 lbs.

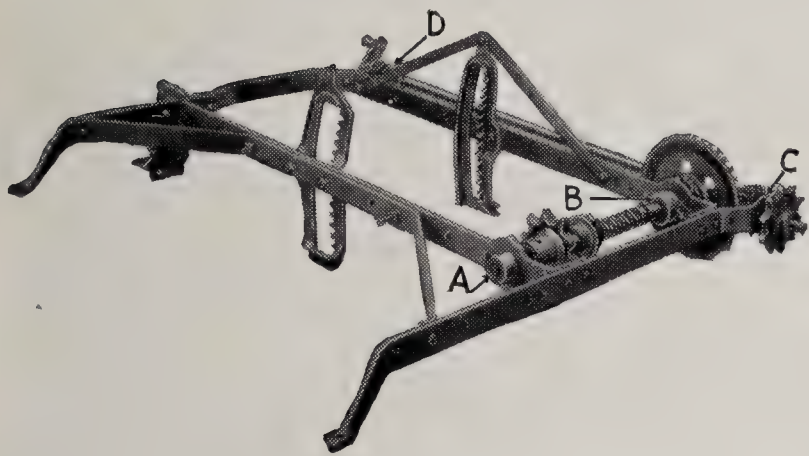
Bands can be placed 10½ inches to 23 inches from butts of bundles.

\*Based on horses traveling 2 miles per hour without stops.





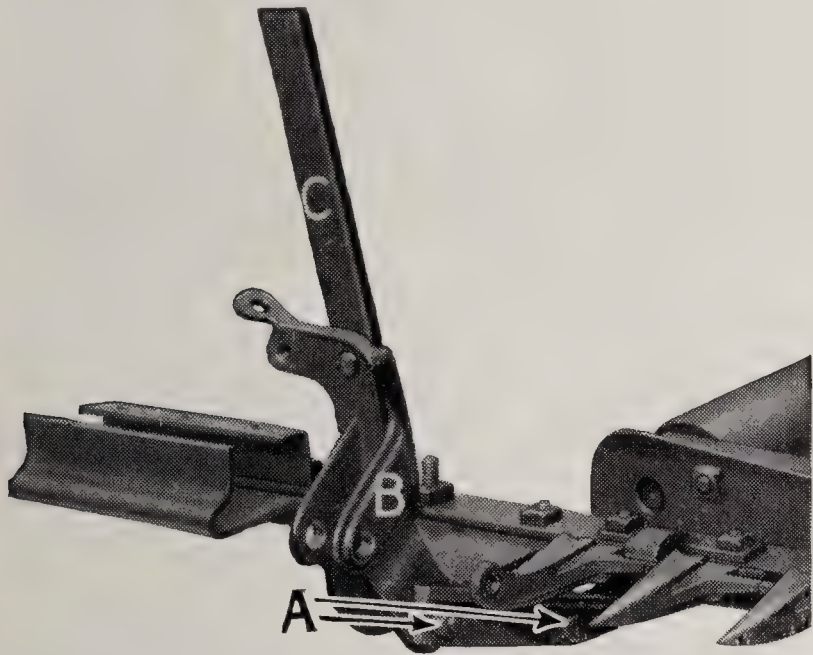
## McCormick-Deering Grain Binders



*Illust. 2—The steel bars forming the frame are riveted together with the edges up and down to resist vertical strains. Thorough side bracing reinforces the frame against twisting and bending. A, B, C and D, location of roller bearings.*

### Main Frame Stays in Alignment

Take a ruler in your hands. It is easy to bend it across the broad side but almost impossible edge-wise. In the frame of the McCormick-Deering binder advantage is taken of this resistance to bending by placing the bars with the edges up and down. Twisting strains are prevented by substantial bracing and an unusually rigid method of attaching the main frame to the platform.



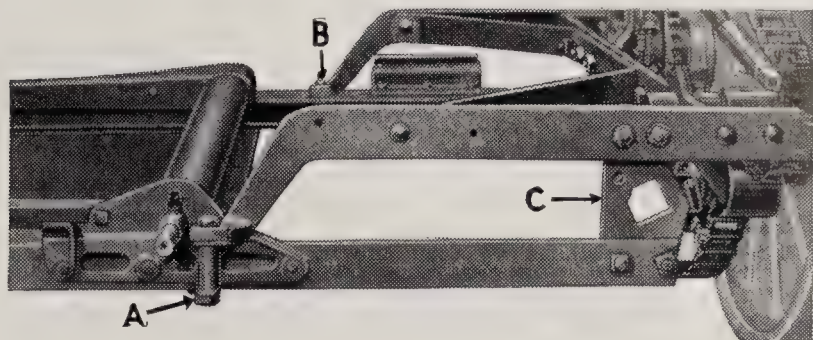
*Illust. 4—The casting, B, forms a rigid connection between the platform and the elevator frame. Two bolts, A, hold it to the angle frame of the platform, and the elevator support, C, is riveted to the same casting.*

A good example of sturdy construction, characteristic of all McCormick-Deering binders, is shown in Illust. 4. The inner end of the platform is supported by an angle sill, the forward end of which is shown under the nuts, A. This sill is bolted to the malleable casting, B, forming the tongue brace and extending upward to support the elevators through brace, C.

### Strong Connection Between Main Frame and Platform

No twisting strain due to rough ground can cause the frame to get out of alignment. The front and back angle sills of the platform extend parallel to

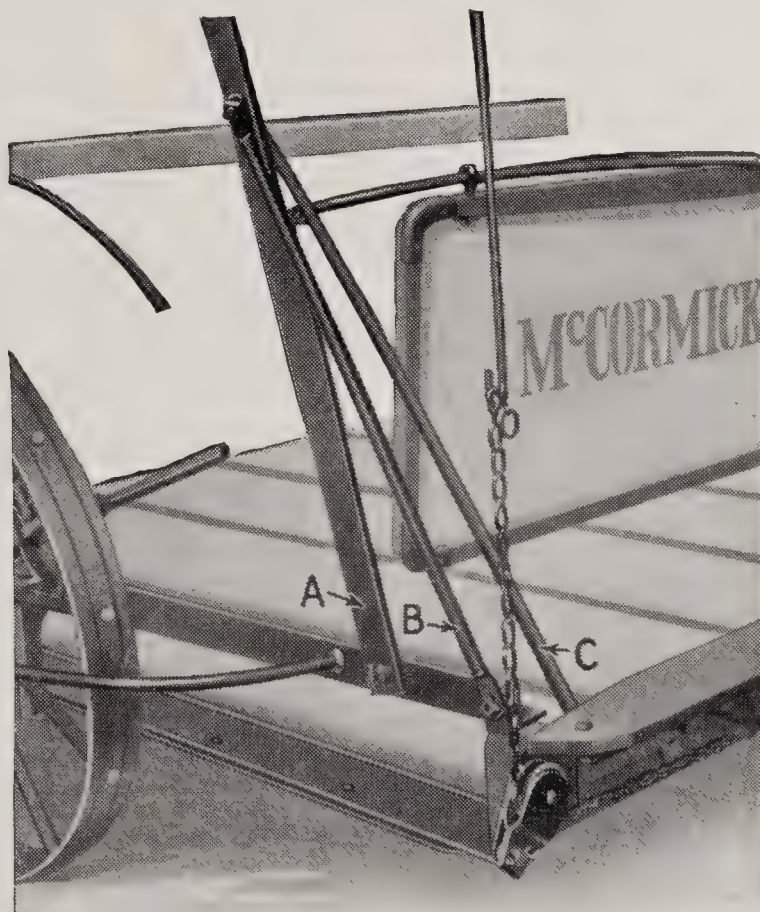
the front and rear members of the main frame for a considerable distance, doubly strengthening this point. The ends of the main frame are then vertically bolted to malleable castings, securely riveted to the platform angles. The ends of the angles are rigidly bolted to steel plates which are in turn bolted to the frame members.



*Illust. 3—The sturdiest connection ever devised between a binder frame and platform. Vertical bolted joints, A and B, and a plate, C, at both front and back, form a perfect union between the parts of the machine.*

### Outside Reel Support Strengthened

The connection of the outside reel support to the platform, a weak point in most binders, has been made strong in the McCormick-Deering by first bolting the reel support to the platform frame and then bracing it securely both right and left. This is not only a more substantial form of construction but does not interfere with long grain dropping over the divider.



*Illust. 5—A weak point in most binders is the joining of the outside reel support and the platform. Beside being firmly bolted to the platform frame, the outside reel support of the McCormick-Deering, A, is firmly supported right and left by braces B and C.*

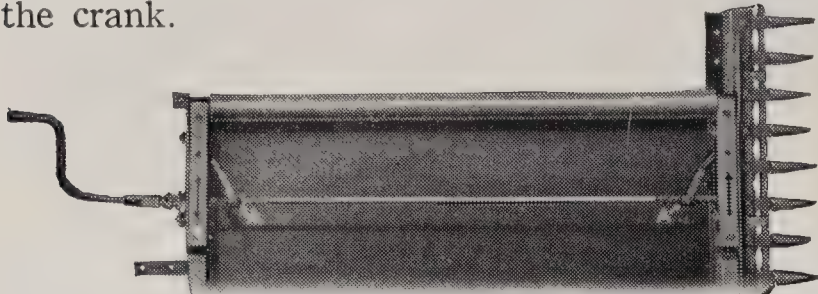




## McCormick-Deering Grain Binders

### Canvases Easily Adjusted

Tightening and loosening the canvases has been such an inconvenient task on many binders that it often has been neglected. To adjust the platform canvas on the McCormick-Deering, it is only necessary to put the crank, supplied with the binder, on to the square shank at the rear of the platform and turn to right or left as required. Two levers, AA, in Illust. 6, are connected with the slides in which the roller is mounted. In the ends of these levers are two nuts which work on threads on the rod running across the platform. This rod is turned by the crank.

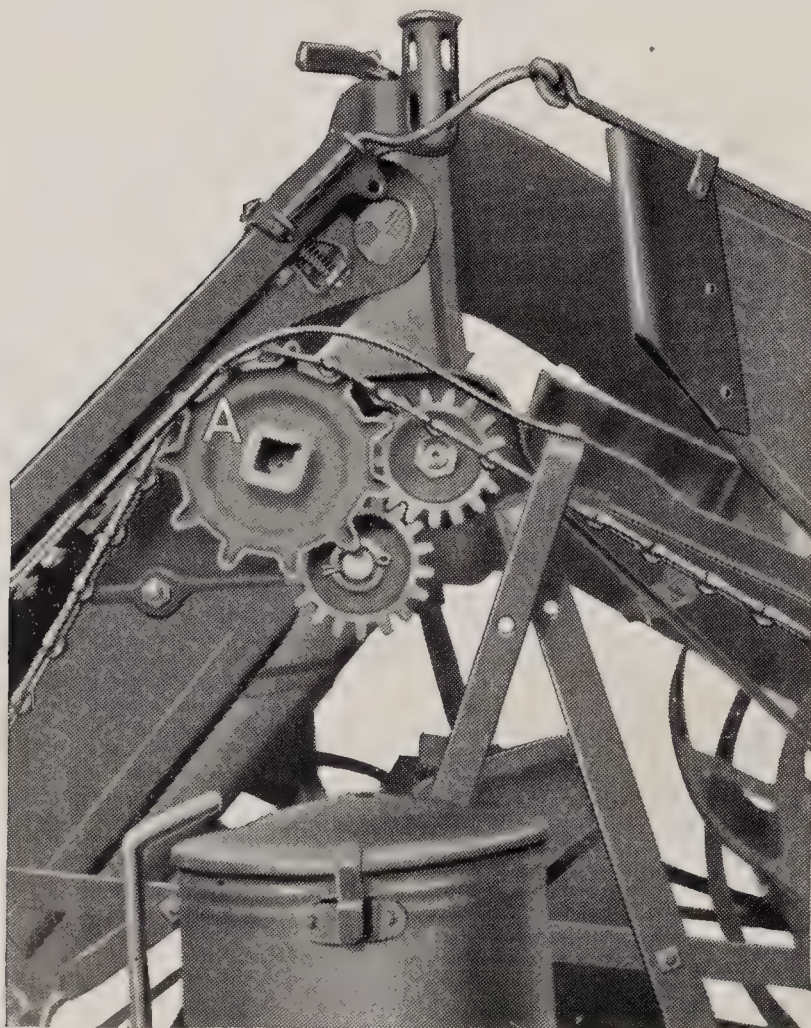


*Illust. 6—Tightening or loosening the platform canvas is made positive by turning the rod, AA. Threads and nuts on this rod operate the levers that move the roller.*

The elevator canvas adjustments are equally simple. The rollers at the lower end of the elevator are hinged and are pushed down to tighten the canvas, and raised up to loosen it. The upper roller is provided with a lock to hold it in working position. The lower roller stays in position after being pushed down.

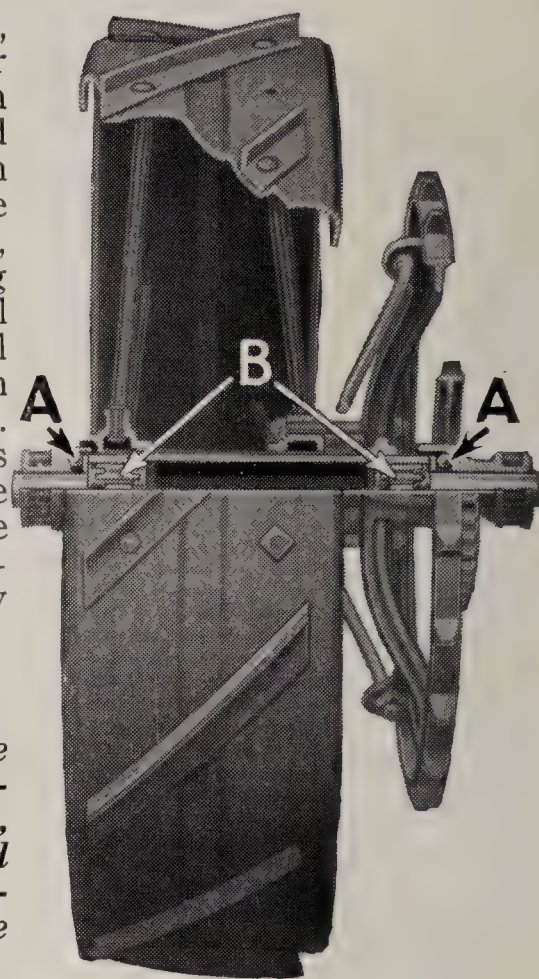
### Many Roller Bearings

In the McCormick-Deering grain binders there are eight roller bearings, one on the crankshaft, two

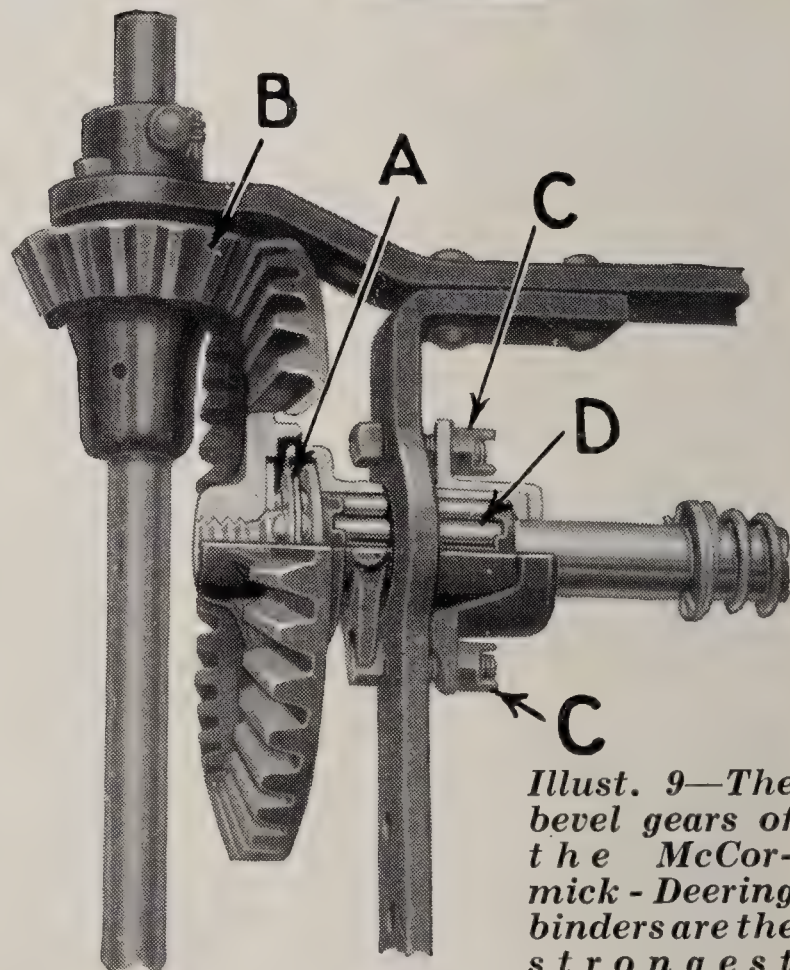


*Illust. 7—There are roller bearings on both ends of the upper elevator roller, A. This means easy running, freedom from excessive wear and better alignment of canvases.*

on the countershaft, two on the elevator drive roller, two on the main wheel, and one on the grain wheel. There are three ball bearings, one thrust bearing in the main bevel gear and two ball thrust bearings in the main wheel. These bearings greatly reduce the draft of the machine and make it a comparatively easy pull for horses.



*Illust. 8 — There are two large roller bearings, B, and two end thrust ball bearings, A, in the main wheel.*



*Illust. 9—The bevel gears of the McCormick-Deering binders are the strongest found in any grain binder. They have large, deep meshing teeth, see B. A is a ball thrust bearing, and D a roller bearing. C is the adjustment to mesh the gears properly.*

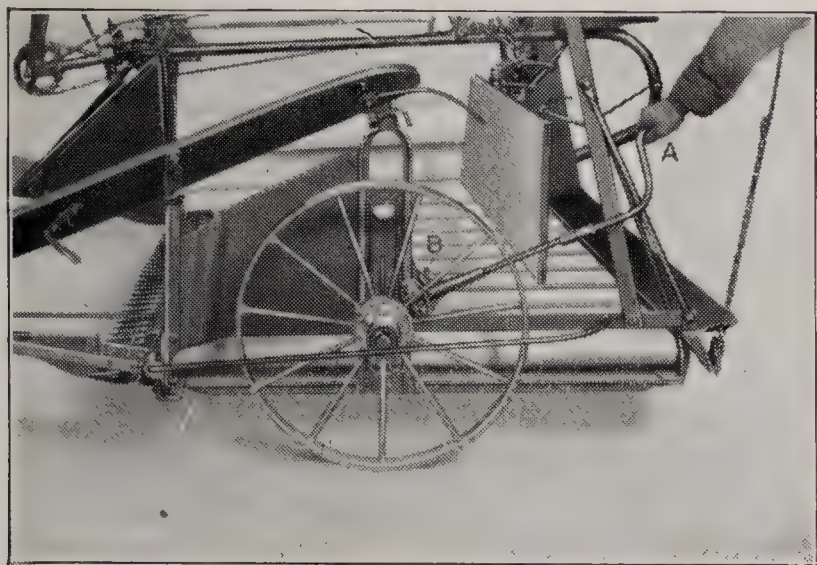
### Extra Strong Bevel Gears

McCormick-Deering binders have the strongest bevel gears of any binder. The teeth mesh deeply and do not get out of mesh. The depth of the mesh is adjustable by means of the nuts, C, as in Illust. 9. The ball thrust bearing that holds the gears in mesh is close to the bevel gear, instead of at the other end of the shaft, as in many other binders. This construction prevents springing of the frame and does not allow the gears to get out of mesh.





## McCormick-Deering Grain Binders



*Illust. 10—Raising or lowering the binder on the grain wheel is easily accomplished with the crank, A. The worm, B, operates in a rack and locks the platform at any desired height.*

### Adjustments Easily Made

It is an easy task for a man to drive and operate the new McCormick-Deering grain binder. The adjustments for successfully harvesting the grain under varying field conditions are few and simple. For raising and lowering the binder on the main wheel, a crank supplied for the purpose is placed over a square shank, and turning this elevates the binder to the desired height. There is the same kind of an adjustment on the grain wheel, as shown in Illust. 10.



*Illust. 11—Every adjustment necessary while cutting grain can be made with levers within easy reach of the seat. A, platform tilting lever. B, reel shifting lever. C, reel raising and lowering lever. D, binder shifter. E, butt adjuster lever. F, bundle carrier foot lever.*

### Levers Within Easy Reach

All levers for making necessary adjustments while cutting grain can be reached easily by the driver. The platform can be tilted, the reel can be set forward or backward, up or down, the binding attach-

ment can be shifted to place the band near the center of the bundle, the butt adjuster can be changed so as to handle long or short grain, and the bundle carrier can be dumped at the will of the driver by means of the foot lever.

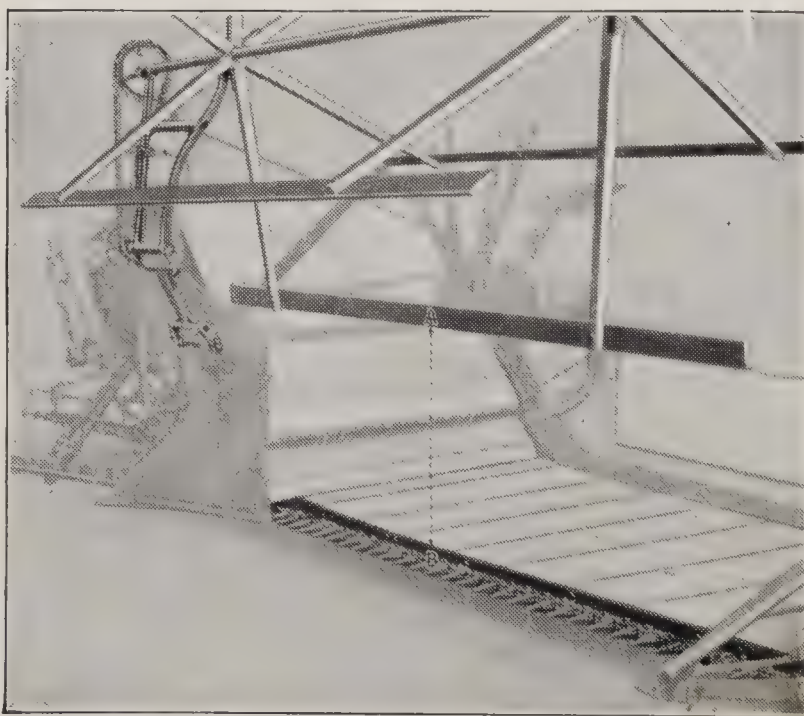
### Harvests Tall or Short Grain

No matter whether your grain is short or tall, adjustments can be made in the binder to meet the conditions. The reel can be adjusted so low that the slats will just miss the guards, and with the platform lowered and tilted the shortest grain or grain badly down and tangled can be harvested successfully.



*Illust. 12—When grain is short, the reel can be lowered until the slats just miss the guards.*

When grain is very tall the reel can be raised to any desired height up to 33 inches above the guards, and set forward or backward. The platform can also be raised so that less straw is cut when the grain is tall. Other adjustments, such as the size of the bundle and the placing of the band at the center of the bundle, are easily made.



*Illust. 13—In tall grain the reel can be raised 33 inches above the guards. A and B indicate the distance between reel and guards.*

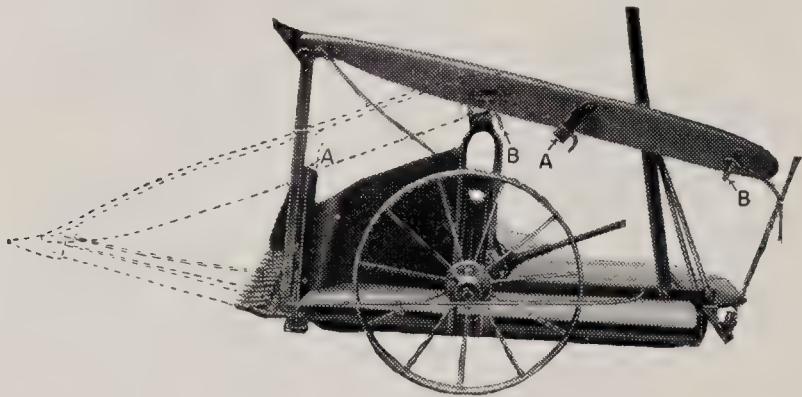




## McCormick-Deering Grain Binders

### Compact Machine for Transportation

It is often convenient to reduce the binder to small compass when transporting it through lanes, narrow gates, and over narrow bridges; also, when storing at the end of the season. Provision has been made for folding the dividers so that they come within the width of the platform, as shown in Illusts. 14 and 15. The dividers are provided with locks which hold them in either folded or working position. Transport trucks can be inserted under the binder frame, the tongue attached at the outer end of the platform, and the machine moved over any ordinary road or through the average gate or lane.

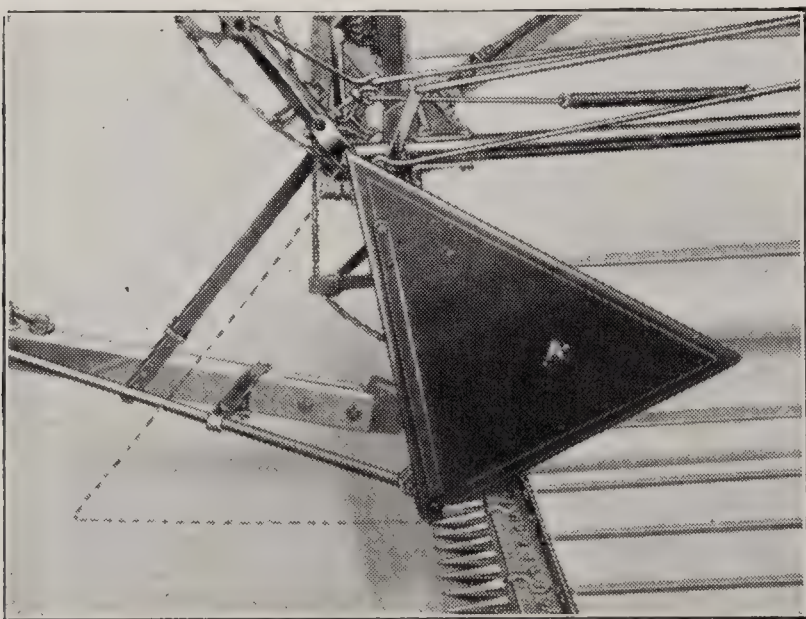


*Illust. 14—For transportation and storage, the outside divider can be folded back. It locks in either operating or folding position.*

### Choice of Binding Attachments

McCormick and Deering binding attachments are well and favorably known. They have stood the test of time and are recognized the country over as the best. To choose between these two attachments from the standpoint of durability, service, and accuracy, would be difficult. Some men prefer the McCormick, others the Deering. After careful consideration it was decided to give our customers their choice.

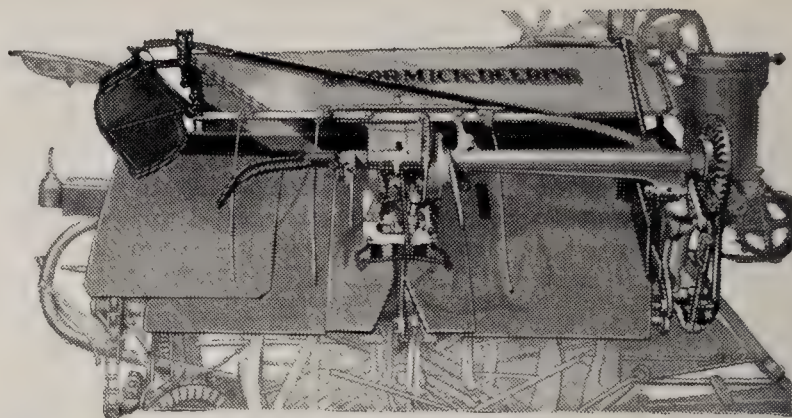
The McCormick-Deering binder is so constructed that either a McCormick or Deering binding attachment can be used without any other changes. Both have adjustments for making large or small bundles and for locating the bands in the center of the bundle.



*Illust. 15—The inside divider turns back from the operating position to a point within the width of the platform; a convenience in transporting through gates and for storage.*

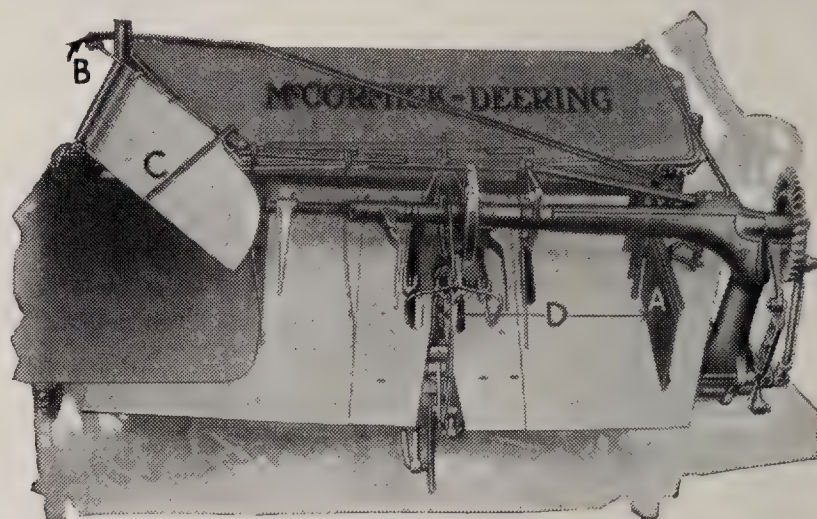
### Dependable Bundle Carrier

The bundle carrier carries five or six bundles. When you trip it the pipe rocks and both ends



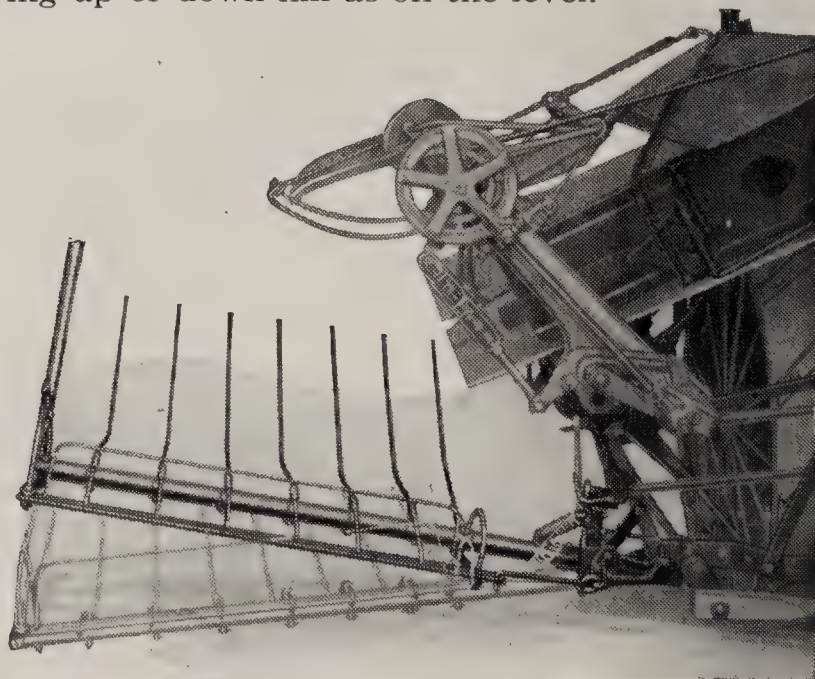
*Illust. 16—The Deering type of binding attachment is popular with some grain growers. If you prefer it you can have the McCormick-Deering binder equipped with the Deering binding attachment.*

drop down so that the tines lie level on the ground for the greater part of their length. The bundles are swept off by the stubble without jar, no threshing or whipping. The spring helps to restore the



*Illust. 17—Some grain growers prefer the McCormick type of binding attachment. It will be supplied with the McCormick-Deering binder if you so order it.*

bundle carrier after dumping. Should obstacles be encountered, the bundle carrier swings out of the way, then back in position again. It works as well going up or down hill as on the level.



*Illust. 18—The bundle carrier is much improved. When tripped it drops low, permitting the stubble to sweep the bundles off on to the ground. It will work just as well going up or down hill as on the level.*





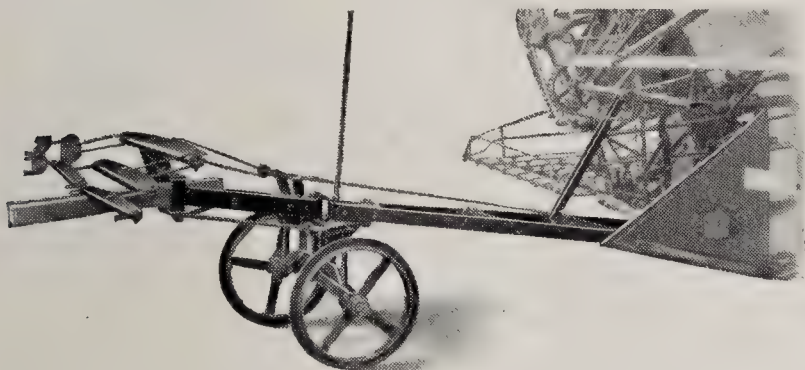
## McCormick-Deering Grain Binders Attachments



*Illust. 19—When mounted on transport trucks the binder can be hauled through narrow lanes and gates.*

### Transport Trucks

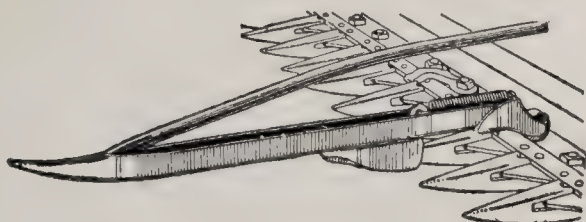
For moving the binder from one field to another, through narrow gates, lanes, etc., transport trucks can be provided. These are inserted in the frame of the binder, the pole is removed and attached to the outer end of the platform, and the team hitched at that point. This makes a convenient way of transporting the binder, as shown in the illustration above. The machine can be reduced to a narrow width by folding the dividers.



*Illust. 20—Auto tongue truck.*

### All-Steel Auto Tongue Truck

The new "auto-steer" tongue truck used on McCormick-Deering binders is all steel, including all-steel eveners. Very strong and substantial. "Auto-steer" feature enables the driver to turn square corners, thus keeping the field square. Saves time and relieves the horses of unnecessary strain.



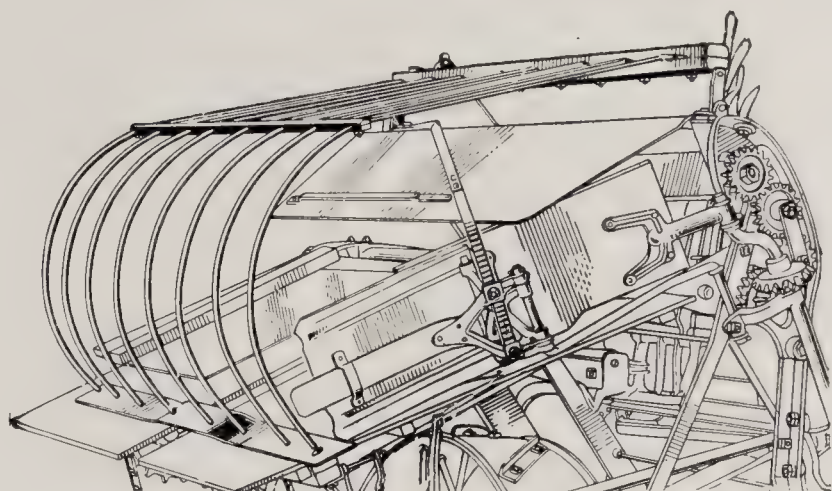
*Illust. 21—McCormick-Deering automatic grain lifter.*

### McCormick-Deering No. 2 Automatic Grain Lifter (See Illust. 21)

The automatic grain lifters are attached to the guards. They raise the badly lodged grain within reach of the reel.

These grain lifters fit any binder, mower, or reaper, but are especially adapted to the McCormick-Deering lines.

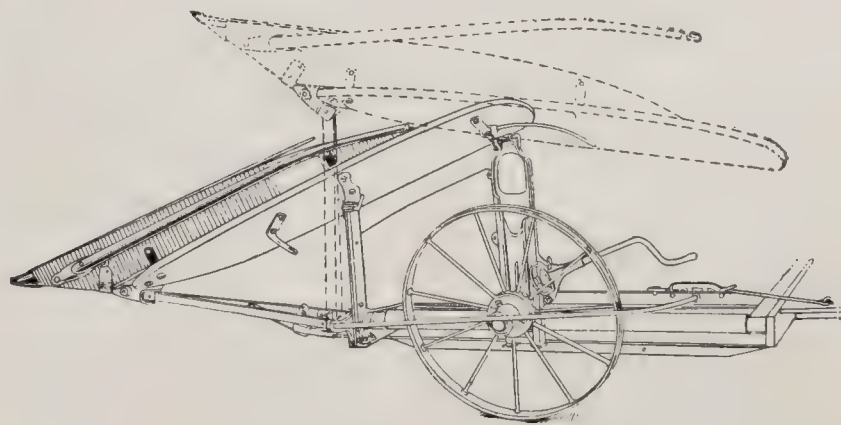
As many lifters as desired may be used, but we recommend the following for grain binders, 4 used on 6 and 7-foot; 5 used on 8-foot. For reapers: 4 used on 5 or 5½-foot cut. For mowers, 1 foot apart for clover, 6 inches apart for peas.



*Illust. 22—Flax buncher.*

### Flax Bunching Attachment

A flax bunching attachment which takes the place of the binding attachment can be furnished for McCormick-Deering binders. It deposits the grain in unbound gavels or bunches. It is operated by a foot lever. The teeth are made of tempered steel.



*Illust. 23—Supplemental outside divider.*

### Supplemental Outside Divider

The supplemental outside divider attaches to the regular divider and is used when the grain is down and badly lodged.

### Tractor Hitches

For tractor hitches see Index.

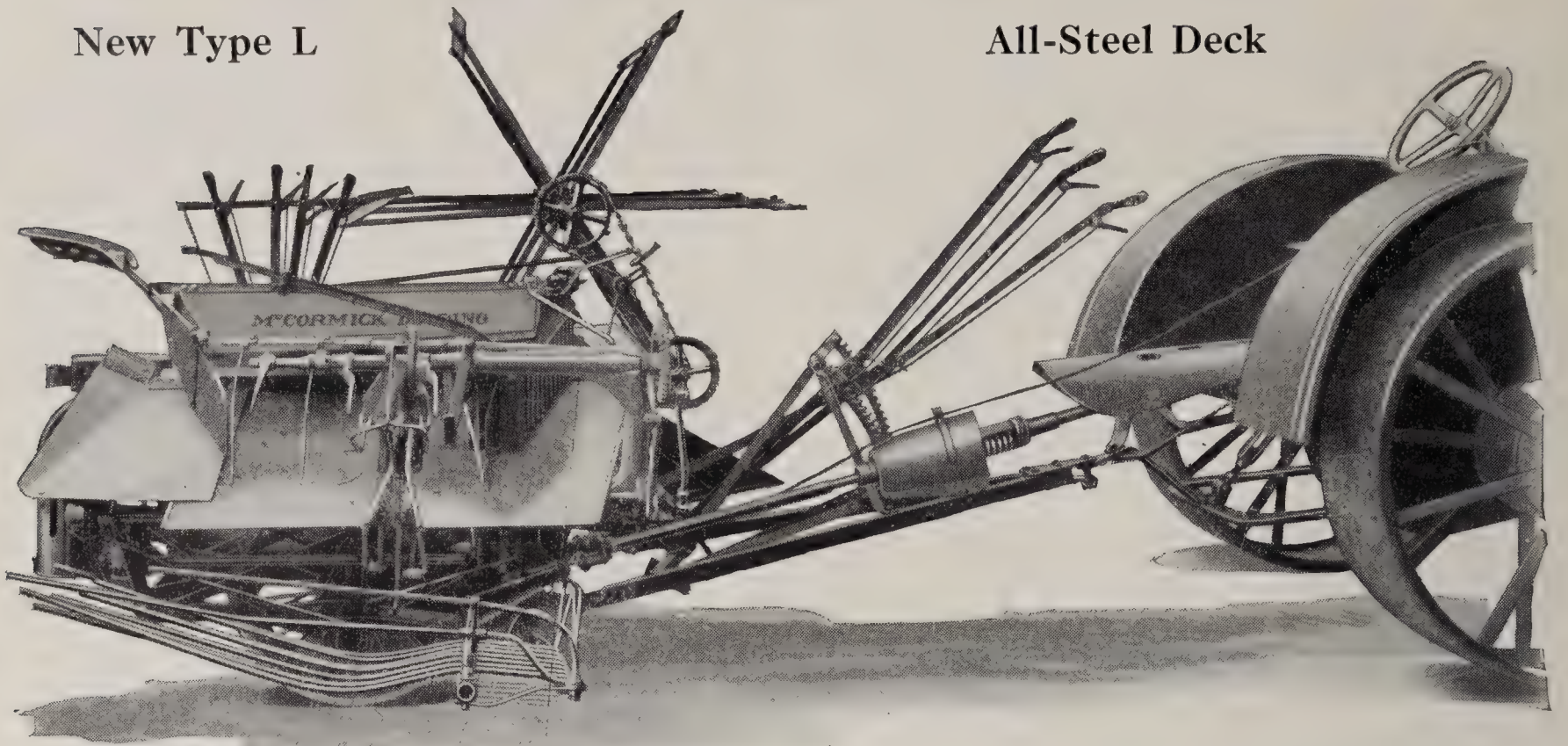




## McCormick-Deering Tractor Binder

New Type L

All-Steel Deck



*Illust. 1—The McCormick-Deering Tractor Binder, driven by power from the McCormick-Deering tractor, cuts a 10-foot swath.*

### Type L Power Drive Binder

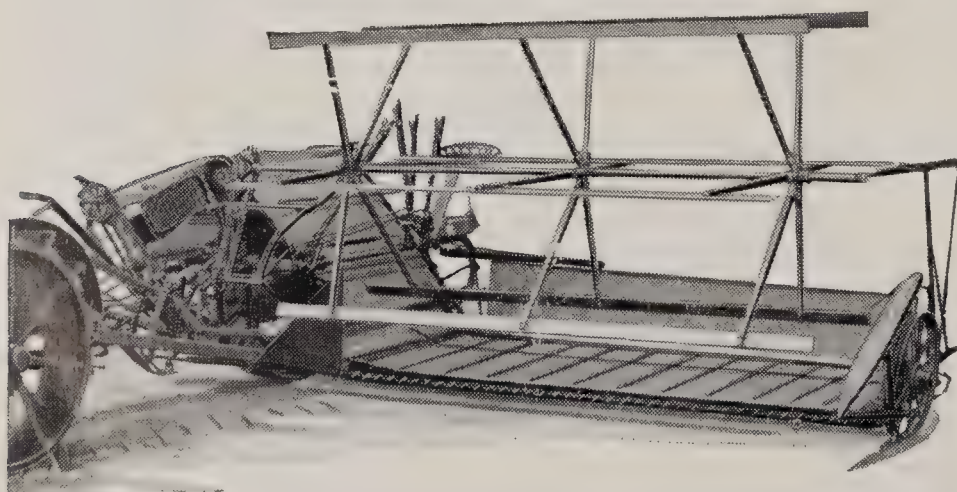
The McCormick-Deering Tractor Binder has been further improved with an all-steel deck and many other minor improvements and refinements that place it still further in the lead. This machine has been proved in actual use for a number of years and successfully meets all requirements demanded of a machine of this kind.

### Operated by Tractor Power

The binder mechanism is driven by power transmitted by a revolving shaft directly from the tractor. This feature of construction insures a steady supply of power to meet the varying conditions of soil and grain. There is no choking of the binder due to slipping of the main wheel because it simply carries the weight of the machine.

### Equals Work of Two 8-ft. Binders

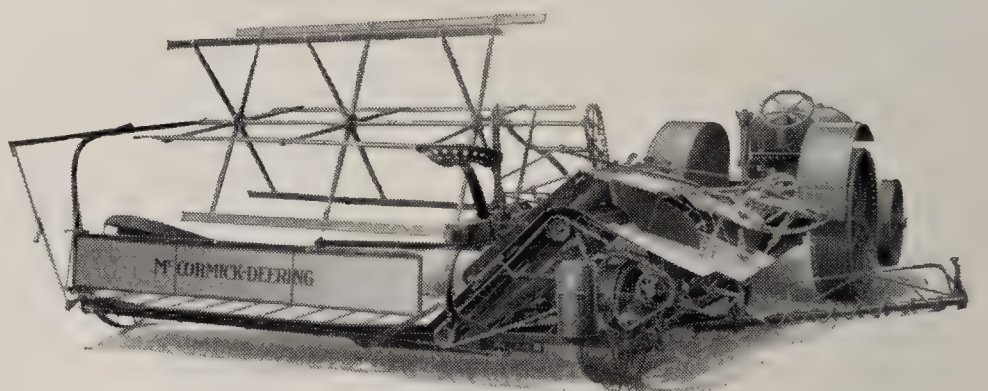
With the McCormick-Deering tractor and 10-foot tractor binder it is possible for one man to harvest as much grain in a day as two men with two 8-foot horse-drawn binders in the same length of time. This is due to the uniformly faster travel of the tractor and to the wider cut of the machine.



*Illust. 3—Front view of the McCormick-Deering Tractor Binder. A wide-cutting machine that does double the work of an 8-foot horse-drawn binder.*

### Under Perfect Control

The power take-off, through which the binder is operated, is controlled by the engine clutch and the belt pulley gear shift lever of the tractor. This permits the cutting and binding mechanism to be operated at uniform speed while the binder and tractor are standing still or moving slowly in wet spots or tangled grain.



*Illust. 2—Rear view of the McCormick-Deering Tractor Binder. Notice the continuous rim on the main wheel which prevents side-slipping on soft ground or hillsides.*

### Regular Equipment

Bundle carrier, outside reel support, retarding strap, power drive shaft with slip clutch, steel deck, tractor hitch and tools.

### Special Equipment

Transport truck, grain lifters, supplemental outside divider, flax buncher, one-man control.

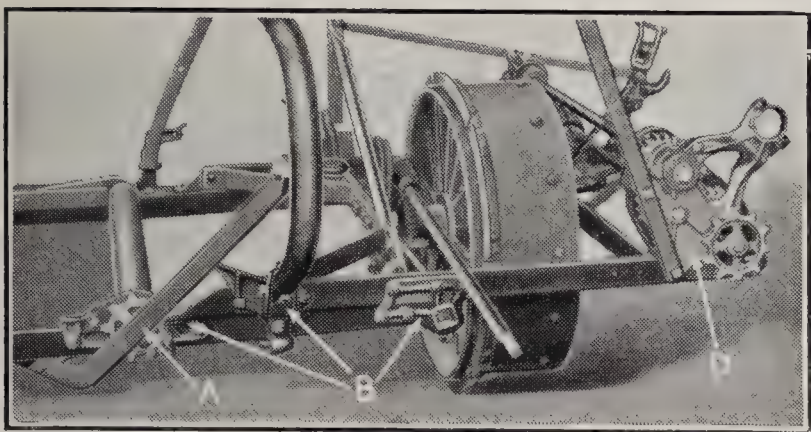
### Specifications

Width of cut.....	10 feet
Forward speeds.....	2 and 3 miles per hour
Highest elevation of reel.....	31 inches
Lowest elevation.....	3 inches
Bands can be placed 10½ inches to 23 inches from butts of bundles.	
Shipping weight (regular equipment)	1,980 lb.
Weight of transport truck.....	150 lb.





## McCormick-Deering Tractor Binder



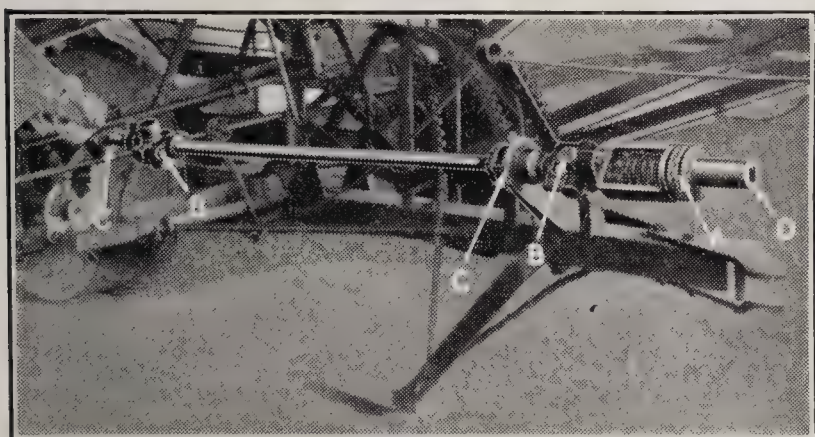
*Illust. 4—The heavy steel brace, A, runs diagonally underneath the platform, making it more rigid and strong. B, rigid connections between platform and main frame. Similar connections are used in the front. C, binder post brace shown from rear. D, cut steel gear housing.*

### Power From the Tractor

The power shaft shown in Illust. 5 transmits the power from the tractor to the binder mechanism. This revolving shaft runs in roller bearings and is similar in construction to the driving shaft of an automobile. The power drive feature of the tractor binder makes it possible to operate the machine on wet, sandy, or slippery ground.

### High-Grade Bearings

The McCormick-Deering tractor binder is equipped with high-grade roller bearings at all important points. These bearings run in housings which retain the oil and keep out the dust and dirt. They reduce friction on these parts to the minimum and save power. The binder is equipped with the Alemite system of lubrication. This is a convenient way of lubricating the machine. With the Alemite pressure system, grease can be forced through the bearings so that there is no possibility of the lubricant failing to reach each wearing surface.



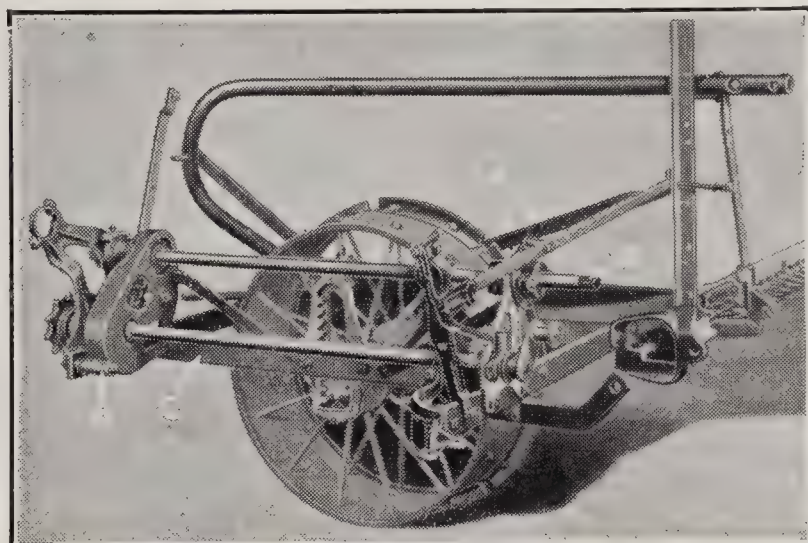
*Illust. 5—Power drive shaft. A, slip clutch which is adjustable to yield before strain is sufficient to break the mechanism of the binder. B, well made, serviceable universal joints. C, high-grade roller bearings. D, provision for hitching and unhitching power drive.*

### Power Shaft Has Universal Joints

The power shaft is equipped with universal joints which make it possible to transmit the power when the machine is making a turn as well as to drive the mechanism when the binder is tilted in different positions. The adjustable slip clutch shown in Illust. 5 prevents breakage if something unusual happens to clog the binder or cutting mechanism.

### Standard Design

The frame is made of heavy steel bars, stronger and more compact than on the regular binder. The binding attachment is similar to that of the standard binder, but is speeded up to take care of the greater flow of grain coming from the wider cut machine. The packer shaft is made of drop-forged steel, which adds materially to its strength. All parts of the knotter, which are subject to wear from the twine and other causes, have been hardened to overcome this difficulty. The main wheel is 26 inches in diameter, 8 inches smaller than the main wheel of the regular binder. The hub has a special bearing surface on the left-hand side to resist end thrust due to the unusually wide cut. No lugs are needed on this main wheel because it merely carries the weight of the binder. A continuous rim is riveted to the wheel to prevent side slippage.

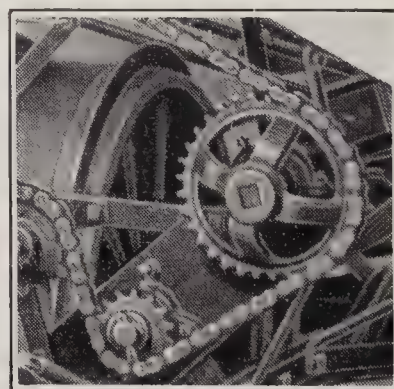


*Illust. 6—The main frame is strong and well braced. A, brace which holds the binder post in proper position. B, power shaft which runs in high-grade roller bearings. C, heavy steel bars are used to make the main frame. D, housing for cut steel gears.*

### Rate of Travel

The McCormick-Deering tractor binder is built of the highest grade materials throughout, and will stand up and give satisfactory service at a faster rate of travel than that of which ordinary binders are used. The tractor travels three miles an hour. This is faster than horses will pull a binder.

*Illust. 7—Cut steel gears transmit the power to drive the entire binder mechanism through the heavy roller drive chain.*

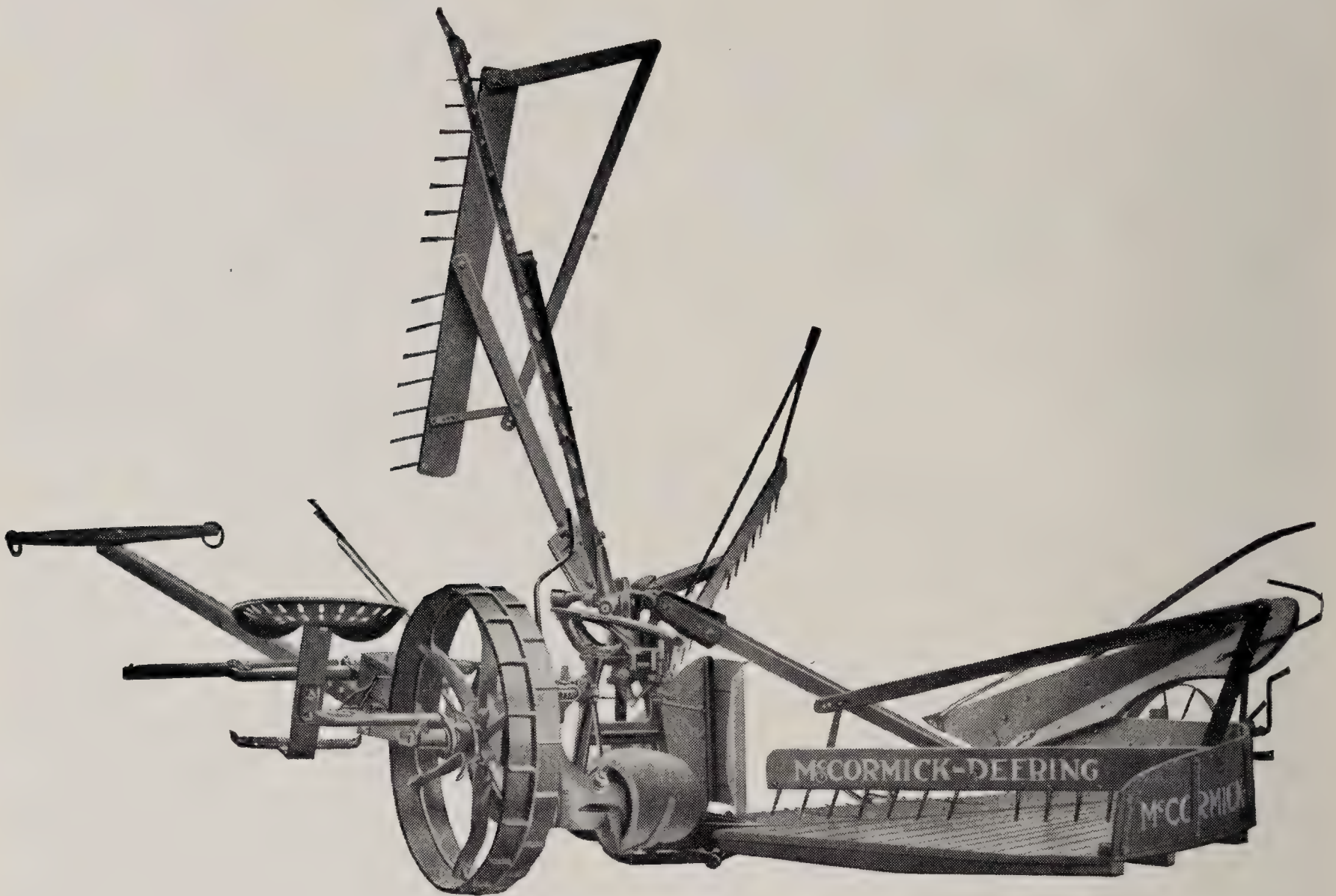


Where the cutting is difficult, the tractor can be slowed down to two miles an hour. At this speed the rate of driving the binder mechanism is the same as when the tractor is running at three miles an hour. This makes it possible to cut the grain under adverse conditions and to run at fast speed where conditions are more favorable.





## McCormick-Deering Reaper



*Illust. 1—The McCormick-Deering Reaper is best adapted for harvesting seed crops.*

### For Grain and Seed Crops

The McCormick-Deering reaper will cut and place in gavels any grain or seed crop. On farms where a binder is not available and where the acreage is limited, it is sometimes used to cut wheat and oats. It will cut flax, buckwheat, rye, barley, and other small grain equally well.

Nursery men have found the McCormick-Deering reaper serviceable in harvesting flower seeds. When cutting crops like clover, alfalfa, etc., for seed, it is sometimes desirable to have them thoroughly cured before stacking. For cutting of this nature a reaper is often preferred and the McCormick-Deering reaper is especially adapted for this work.

### A Convenient Machine

An important feature of the McCormick-Deering reaper is the ease and dispatch with which the driver can make every adjustment to meet varying crop conditions without leaving the seat. He can quickly adjust the rakes to sweep the platform, to have them act as reels without sweeping or tilt the platform to throw the knife down for picking up lodged grain.

The rakes can be set so that every second, every third, every fourth, every fifth or all the rakes will sweep the platform as the operator desires. The reaper can be folded into small space for storage or for hauling through narrow lanes and gates.

The grain wheel can be removed from the outer platform for transport purposes, the whole operation being accomplished in a few minutes without removing a bolt.

### Regular Equipment

Tongue, neckyoke, evener and tools.

### Extra Equipment

Caster wheel to support tongue.

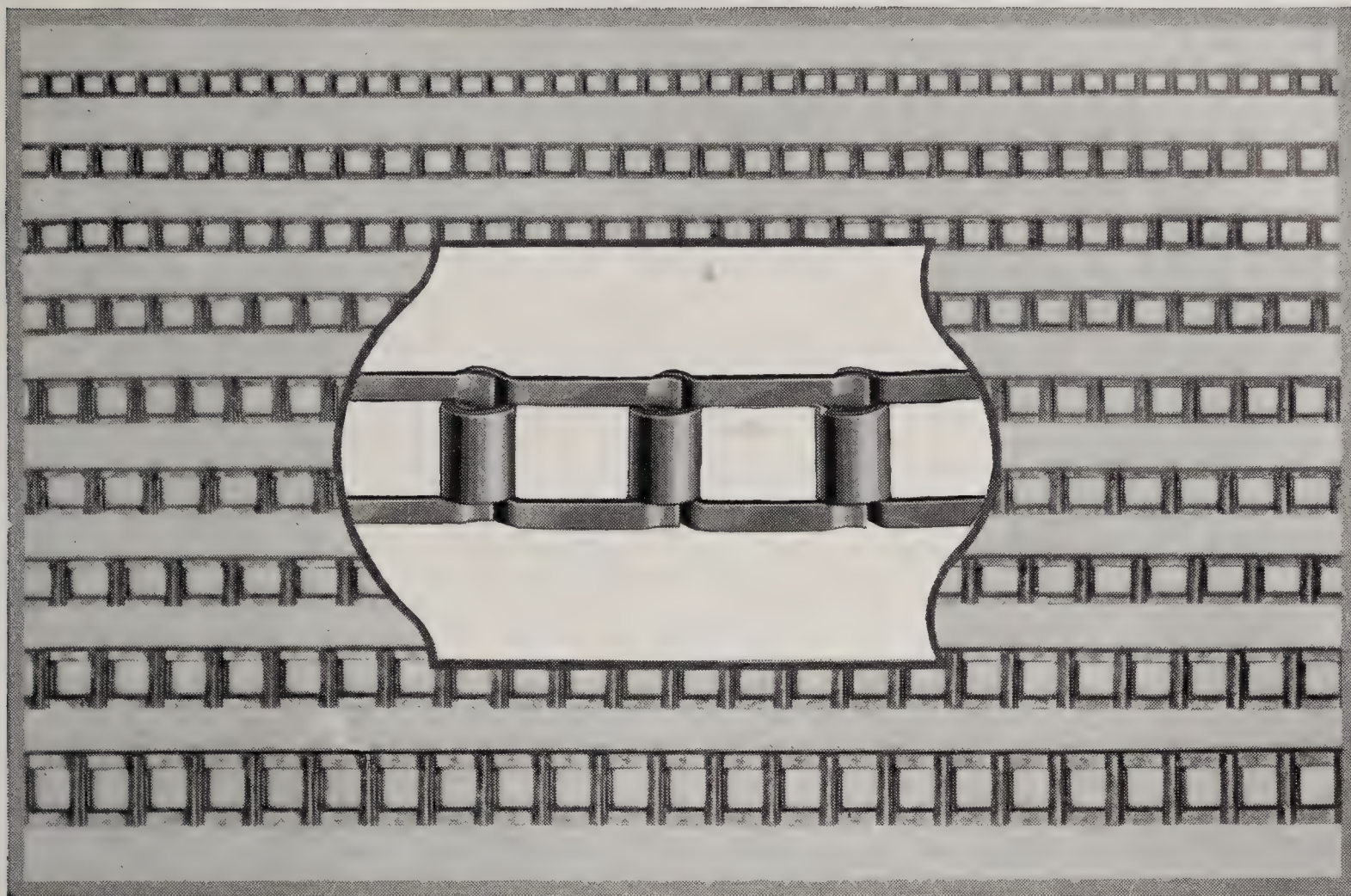
### Specifications

Cut.	Main Wheel		Approx. Weight
	Diameter	Face	
5 ft.	32 in.	7 in.	945 lbs.
5½ ft.	32 in.	7 in.	960 lbs.





## McCormick-Deering Steel Chain



*Illust. 1—McCormick-Deering Steel Chain is made in nine standard sizes.*

### A Standardized Product

The increasing use of steel chain for driving sprockets on many McCormick-Deering farm machines is another step forward in the standardization of parts and equipment used throughout the complete McCormick-Deering line. It is a part of the Harvester Company's continuous program of standardization as it is now progressing, not only on chains but also on many other parts.

Nine standard sizes of steel chain are used on McCormick-Deering farm machines—thus eliminating the need of the McCormick-Deering dealer carrying a wide variety and assortment of chains in stock—a standardization equally as advantageous to farm machine owners.

### Advantage of Steel Chain

McCormick-Deering steel chain, by its strength, durability, and accuracy of size and fit, has proved itself superior to other types of chain. Being made of high-grade steel, it may be depended upon to be strong and durable. Its pulling strength and durability far exceeds that of malleable cast chain. Each and every foot of steel chain is tested for breaking strength before it is assembled on the machines, or bound for shipping.

The process of making steel chain maintains an accuracy of size and uniformity of quality which cannot be reproduced in manufacturing other types of chain. Each link is cut from a ribbon of steel in a steel die; therefore, the same sized links are always

accurate in length and the barrel and pintle ends are always uniform in size and shape. This accuracy and uniformity of size is assurance that all McCormick-Deering steel chain will fit on the sprockets for which it is intended.

As each link is cut in the steel die it is assembled into a complete chain. It is then heat-treated, dried, drawn in oil, and then the oil is baked on the chain, leaving a hard, baked-oil coating, which increases its resistance to rust, at the same time leaving the chain in a nice condition for handling.

Since steel chain is regular equipment, it should always be carried in stock as repairs. It not only can be used on McCormick-Deering machines, but works equally as efficiently on many machines formerly manufactured by the Harvester Company and sold under various trade names, such as "McCormick," "Deering," "International," "P & O," "Kentucky" and "Hoosier."

### Reduces Operating Costs

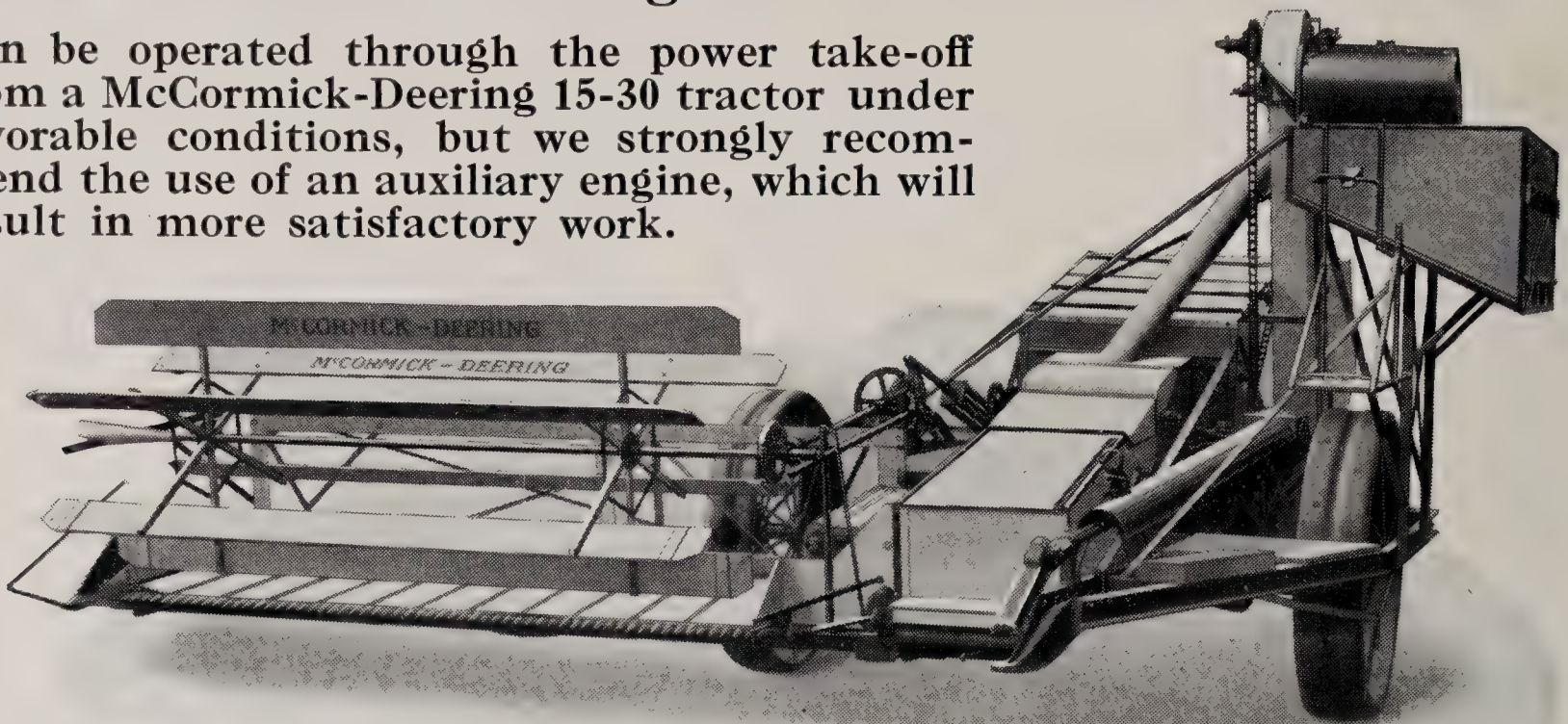
The man who selects his farm operating equipment from the McCormick-Deering line secures all the advantages of this standardized product, steel chain. Its durability and strength keeps down his operating cost, its accuracy of size and fit assures maximum working efficiency. By selling the users of McCormick-Deering farm machines steel chain they are rendered a valuable service, a service which gives them the many advantages of standardized equipment—productive of a profit.





## McCormick-Deering No. 8 Harvester-Thresher

Can be operated through the power take-off from a McCormick-Deering 15-30 tractor under favorable conditions, but we strongly recommend the use of an auxiliary engine, which will result in more satisfactory work.



*Illust. 1—McCormick-Deering No. 8 harvester-thresher. A one-man outfit that cuts 10 feet wide and harvests and threshes 30 to 40 acres a day.*

### Specifications

Range of tilt of platform.....	32 inches
Width of platform apron.....	36 inches
Width of conveyor.....	24½ inches
Cylinder speed.....	1000 to 1100 r.p.m.
Diameter of cylinder.....	18 inches
Width of cylinder.....	24 inches
Number of bars in cylinder.....	8
Grate surface.....	21 x 24¾ inches
Length of straw racks.....	8 feet 4 inches
Width of straw racks.....	37 inches
Main wheel width.....	12 inches
Grain wheel width.....	9 inches
Diameter of main and grain wheels.....	54 inches
Tread of wheels.....	8 feet 8 inches
Bagging platform.....	42 inches wide x 55 inches long
Over all width, with bagging platform.....	21 feet 3½ inches
Over all width, with grain tank.....	19 feet 6 inches
Height.....	10 feet 6 inches
Length.....	20 feet 6 inches
Weight with grain tank.....	6460 lbs.*
Weight of bagging platform.....	380 lbs.*
Weight of wagon loader.....	40 lbs.*
Weight of straw spreader.....	150 lbs.*

### Regular Equipment

Power-drive attachment (this does not include the power take-off which is a part of the tractor); one-man control for raising and lowering the platform from the tractor seat. Straw spreader for spreading the straw 8 to 12 feet wide behind the machine. Buyer may have his choice of bagging platform or wagon loader for delivering the grain directly to a wagon drawn alongside the machine.

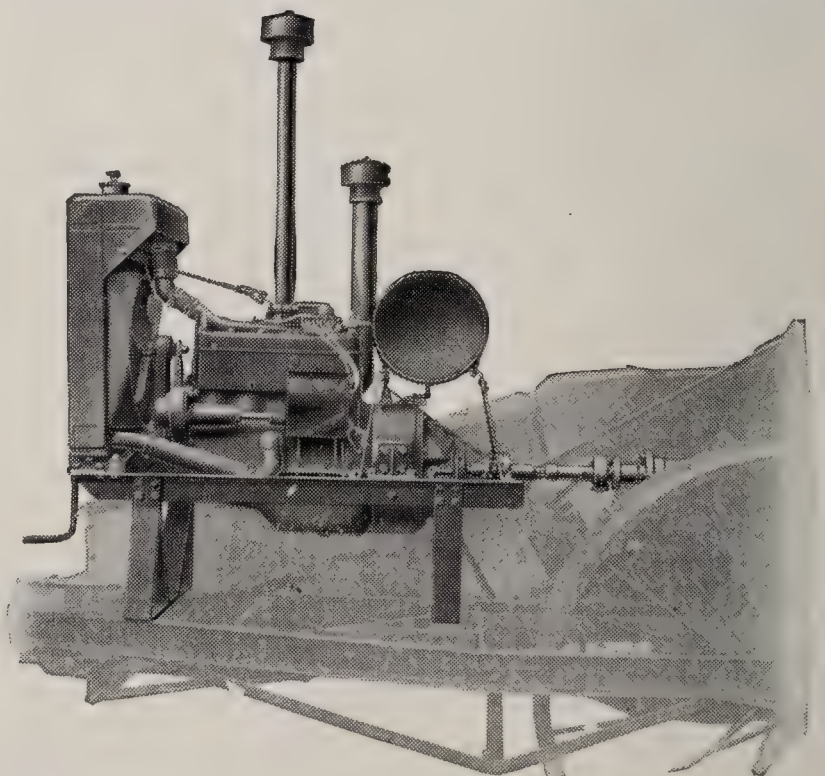
### Extra Equipment

Bagging platform or wagon loader when furnished extra in addition to the regular equipment of the machine. Horse-hitch and forecarriage. Auxiliary engine. Self-feeder and straw carrier for stationary threshing. Grain tank holding 30 bushels of grain. Straw buncher. Soy bean harvesting attachment.

\*Approximate.



*Illust. 2—For transportation the platform of the No. 8 folds and the reel is removed and hung on hooks at the side of the machine.*



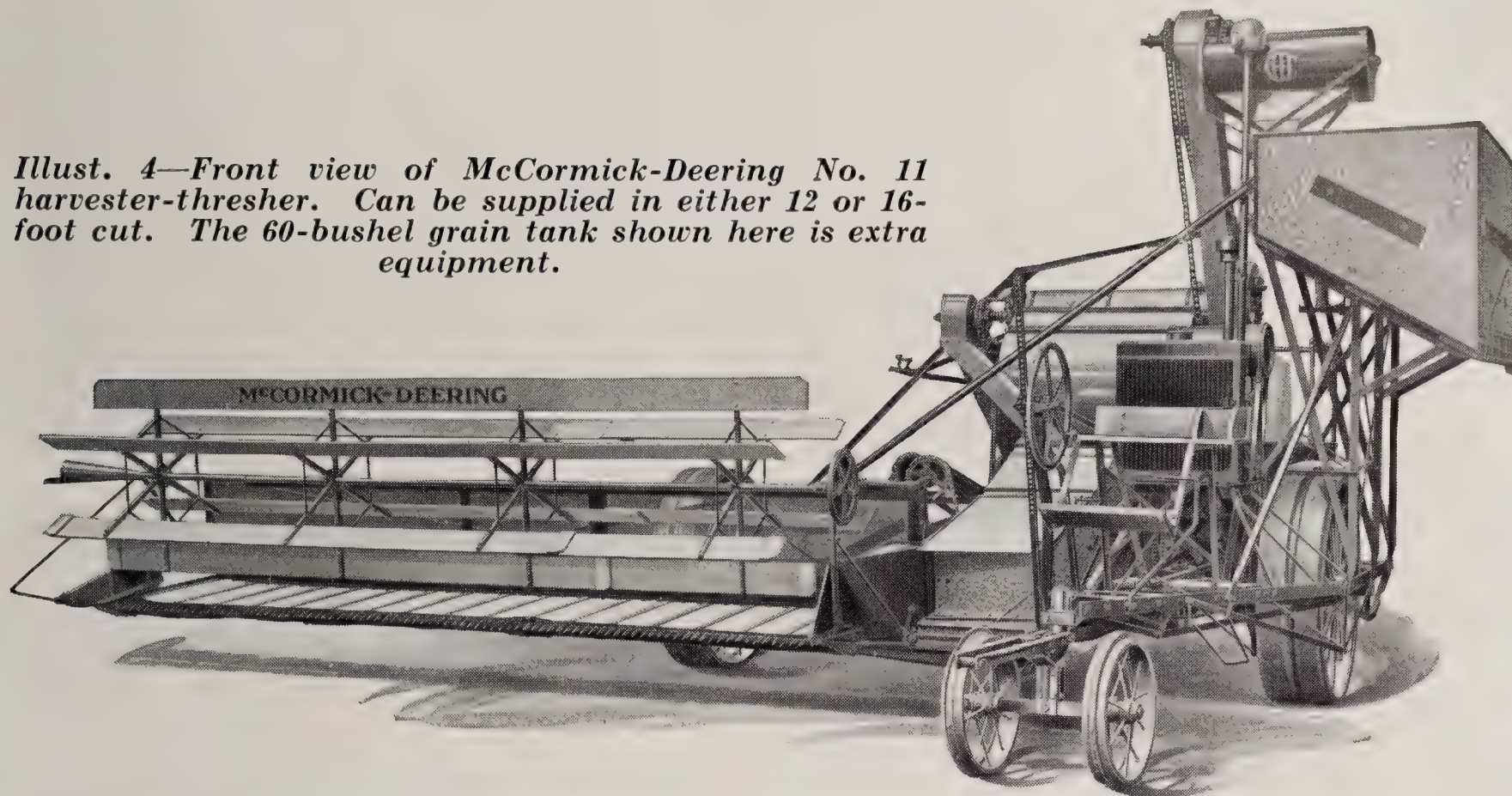
*Illust. 3—Auxiliary engine is mounted substantially on the frame. The use of this engine is recommended in order to assure clean separation on fields that are rolling. It operates the mechanism at constantly uniform speed.*





## McCormick-Deering Harvester-Threshers

*Illust. 4—Front view of McCormick-Deering No. 11 harvester-thresher. Can be supplied in either 12 or 16-foot cut. The 60-bushel grain tank shown here is extra equipment.*



### Difference Between Profit and Loss

There are many cases where grain can be harvested with a McCormick-Deering combine at a profit, and yet these same cases would show a loss if handled in the old way with separate operations. Land on the "margin" which cannot be made to pay under the old system will yield good returns when harvested with the combine. Mill and elevator men tell us that wheat from a McCormick-Deering harvester-thresher often comes to them cleaner and in better condition than wheat handled by the binder and stationary thresher.

### Built in Two Sizes

McCormick-Deering No. 11 harvester-thresher is built for Canada in two convenient sizes, cutting either 12 or 16 feet as ordered. The cutting and threshing mechanism on both sizes is driven by an auxiliary 4-cylinder engine, which maintains an even threshing speed regardless of the rate of travel.

### Saves Time and Money

The use of the harvester-thresher cuts the cost of harvesting and threshing in half under ordinary circumstances. Harvesting and threshing become a family affair that can be undertaken by the farmer and his boys and finished up with no hiring of uncertain help and with no hardship on the women-folks.

### To Store the Machine

By removing the grain tank, elevators, air intake and exhaust pipes, the height can be reduced to ten feet. When the platform is removed the thresher portion of the machine measures 27 feet in length and 10 feet 9 inches in width. The platform, including the supporting frame, is 9 feet wide. When the platform is stored beside the thresher, a portion of the supporting frame can be placed under the body of the thresher.

### Specifications

Total width 12-foot machine.....	25 feet
With grain tank or bagging platform.....	
Total width 16-foot machine.....	29 feet
With grain tank or bagging platform.....	
Total length over forecarriage and straw spreader.....	27 feet
Width of grain wheel.....	12 inches
Width of main wheel.....	15 inches
Diameter of main and grain wheels.....	54 inches
Total height of machine in the field.....	13 feet 6 inches
Width with platform folded—12-foot machine.....	19 feet
Width of separating space.....	42 inches
Length of straw rack.....	100 inches
Width of each straw rack section.....	10 inches
Approximate speed of threshing cylinder.....	1000 r.p.m.
Approximate speed of auxiliary engine.....	1300 r.p.m.
Approximate shipping weight.....	9900 lbs.

### Regular Equipment

McCormick-Deering No. 11 harvester-threshers are regularly equipped with a 4-cylinder stationary engine for operating the threshing mechanism, reel and sickle. A tractor hitch is provided and the buyer may have his choice of wagon loader or bagging attachment. Straw spreading attachment is supplied as regular equipment.

### Extra Equipment

When ordered, a hitch for pulling the harvester-thresher with horses as follows: hitch for eight horses, additional parts for making a 10 or 12-horse hitch.

For stationary threshing: self-feeder and straw carrier.

Straw collector for dropping straw in bunches, straw carrier for loading straw onto a wagon, 60-bushel grain tank, pulley block and tackle for hoisting engine, air cleaner for engine.

When supplied as an extra: straw spreading attachment, bagging attachment, wagon loader.





## International Motor Trucks

For Grain and  
General Farm Hauling



*Illust. 1—International Motor Truck equipped with grain tank body for grain and general farm hauling.*

### For All Farm Hauling

Canadian farmers are buying more and more motor trucks for grain hauling and general farm use every year. The great amount of time spent on the road by horse teams means that much time lost. This time could pay a good profit if applied to some productive work. International farm trucks actually make it possible for the farmer to have more time around the farm for profitable work.

Moreover, the motor truck does the hauling much better and cheaper than by horses. An International will make four or five trips to one with horses, and its sixty-bushel grain tank body will make short work of delivering the crop. The total cost of hauling grain by truck is less and there are no inconveniences, such as putting up at the hotel and livery barn.

Comfort for the driver, regardless of the weather, is assured with the warm, weather-tight cab. The dependable *service* and low cost of the sturdy-built International is far ahead of the light-type of truck which does not stand up under severe use.

### Large-Capacity Grain Body

The sixty-bushel grain tank body regularly supplied on the International is ideally adapted for grain hauling. Two doors, one in the end-gate and the other in the bottom near the rear, facilitate unloading. The entire end-gate may be removed for hauling lumber, or hay, and with very little effort can be converted into a satisfactory stock rack. These features merely indicate its possibilities for general farm hauling.

### Specifications of Truck

**Speed**—25 to 35 miles per hour.

**Wheelbase**—130 inches.

**Frame**—Pressed steel channel, 6 inches deep,  $\frac{3}{16}$  inches, with five cross members.

**Engine**—Model 24, 4 cylinders,  $3\frac{3}{4} \times 5$  inches; Model 26, 6 cylinders,  $3\frac{1}{4} \times 4\frac{1}{2}$  inches. Cast en bloc, detachable L-shaped cylinder head. Banjo mounting at rear of engine.

**Clutch**—Dry plate, double disk.

**Transmission**—Sliding gear, selective, three speeds forward and reverse.

**Wheels**—All metal, with straight side demountable rims.

**Brakes**—Both service and emergency, internal expanding in rear axle drums. Braking surface  $4\frac{1}{2}$  inches wide.

**Regular Equipment**—Heavy pneumatic truck cord tires, 30 x 5; speedometer; front fenders; nicked radiator shell; electric starter; electric lights; storage battery; electric horn, power tire pump and tools; auxiliary rear springs.

**Extra Equipment**—32 x 6 truck cord tires.

### Specifications of Grain Tank

Length over all.....93 inches

Depth..... $28\frac{3}{4}$  inches

Capacity of tank.....59 bushels

Width inside top.....54 inches

Width inside bottom..... $41\frac{1}{2}$  inches

Weight of tank.....525 lbs. approx.

**Floor**—Tongued and grooved,  $\frac{7}{8}$ -inch clear yellow pine with iron plates along outer edges.

**Cross Sills**— $2\frac{1}{4} \times 4$  inches, oak.

**Sides**—Of high-grade box lumber. 10-inch boards top and bottom with 8-inch flare boards. Joints of steel plates riveted to boards. Four heavy straps on each side. Extra braces at rear to hold sides in place. Three stay rods.

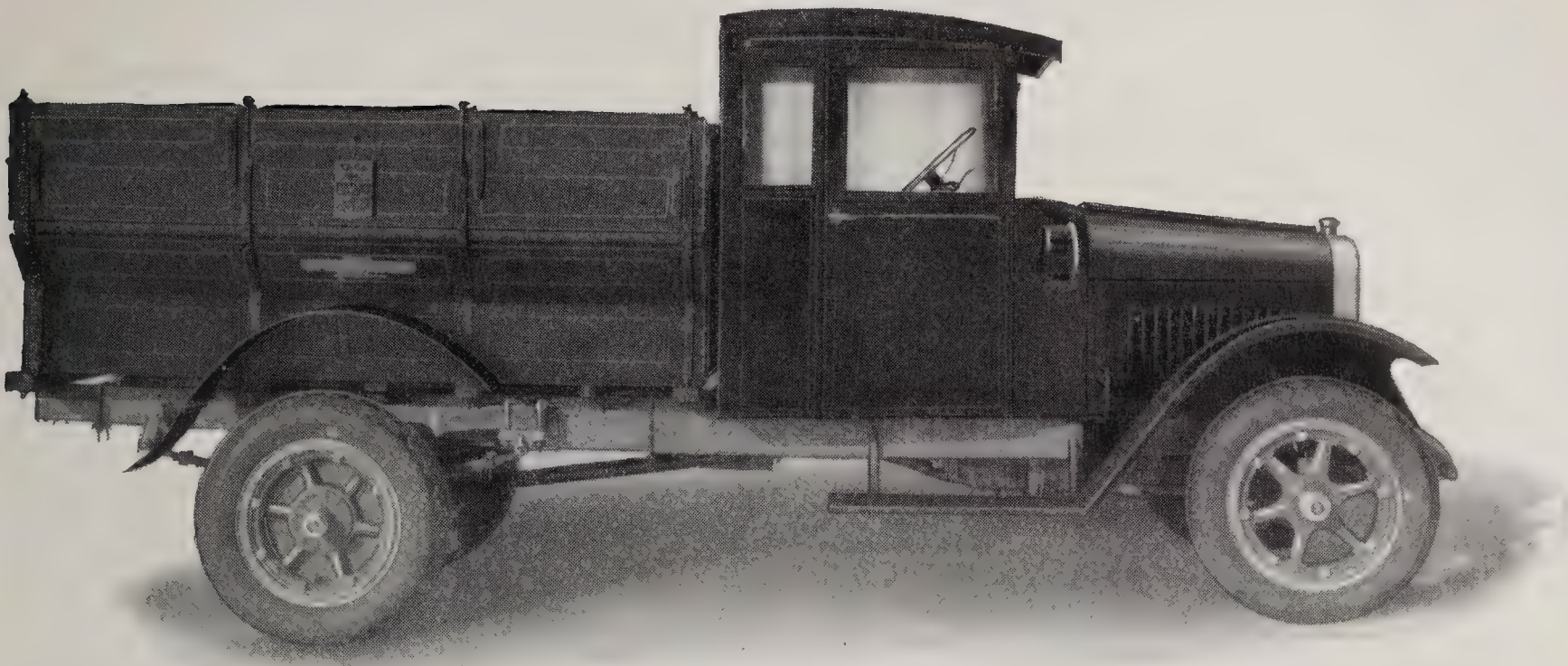
**Sliding Grain Door**—8 x 20 inches, with self-locking handle in rear end of box. Drop door in bottom just back of rear axle, 10 x 16 inches, operated with lever at side of box.

**Extra Equipment**—Tip-top box.





## International Motor Trucks



*Illust. 2—International Motor Truck with grain tank and tip-top box for hauling larger loads, when road conditions are favorable.*

### Chassis is Strong and Rugged

Simplicity and clean-cut design characterize the entire construction of International farm motor trucks. From radiator to rear axle, each unit is carefully perfected and coordinated with all others; producing an assembly which is efficiently adapted to all kinds of farm hauling. The chassis and motor of the Model S farm truck are designed for real truck service and it is in no sense a revamped passenger automobile.

### A New Engine

The appearance and construction of the new engine on International farm trucks is in keeping with the entire chassis. It is simple, clean-cut and accessible in event of necessary adjustment. This is a valuable feature on a farm truck. International farm motor trucks are ordinarily equipped with 4-cylinder engines but may be had with 6-cylinder engines, if preferred.

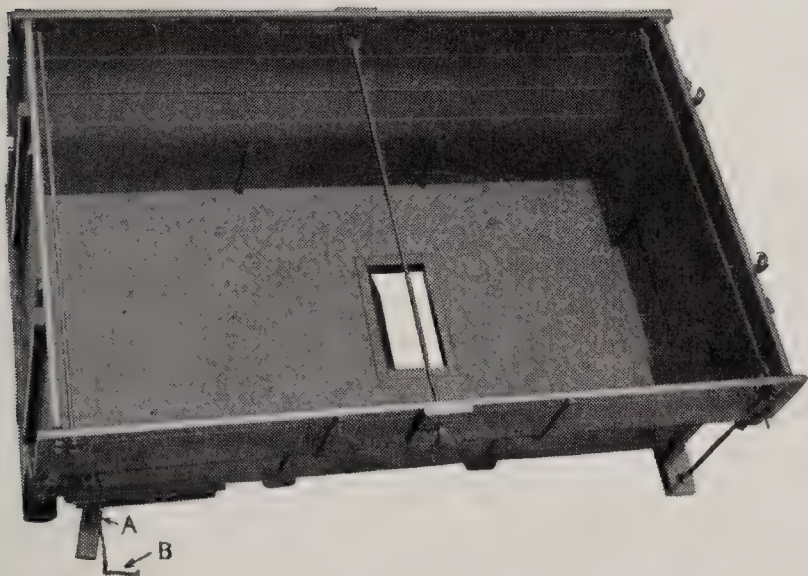
The construction of the engine is of the latest and most approved design for this class of truck. The extra care and precision which go into the

making of this engine insure economical, trouble-free operation and satisfactory performance over long periods of time.

### Rear Axle and Brakes

Great strength and rigidity are incorporated in the rear axle assembly of International trucks, which is an assurance of protection from future trouble. Spiral bevel gear drive is used and the axle shaft drive gears and differential gears are always in perfect alignment.

Good brakes are a special feature on these trucks. Both service and emergency brakes are of the internal expanding, self-contained type and are protected from dust by special guards which exclude all foreign matter.



*Illust. 3—Interior of Canadian-built grain tank.*



*Illust. 4—Sliding grain door with self-locking handle is flax tight. It is used at the elevator for dumping grain. The entire end can be removed for hauling lumber or pipe.*





## International Motor Trucks

### The World's Most Complete Line

While the sale of International motor trucks to farmers will continue to increase as the roads improve and the financial condition of the West becomes easier, the fact should not be overlooked that every town, large or small, is a potential market for trucks. Merchants, lumber yards, dray lines, creameries, produce and fruit dealers, cross-country bus lines, and the municipalities themselves are constantly in the market for transportation.

The International line of motor trucks is the most complete in the country. Trucks are made in sizes ranging from 1500 pounds capacity to big chain-drive models capable of hauling 5 tons or

more. Regular or extended wheelbases and any desired style of body can be supplied. Special attention is paid to municipal bodies. International motor trucks for road maintenance, garbage collectors, and fire trucks, are in use in many large and small Canadian cities. We cater particularly to municipal requirements, and because of the nearness of our service stations, we can keep our trucks constantly in good condition and delivering economical service.

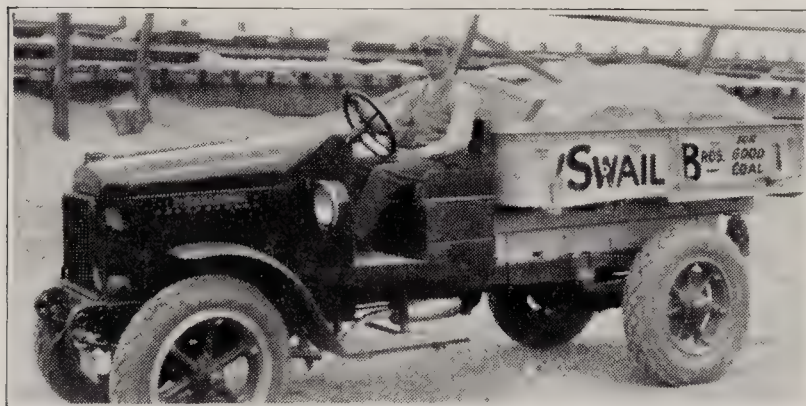
On this page are illustrated only a few of the many styles and sizes which can be supplied. Write for complete literature and prices.



*Low hung frame makes easy loading.*  
Capacity, 4000 lbs.



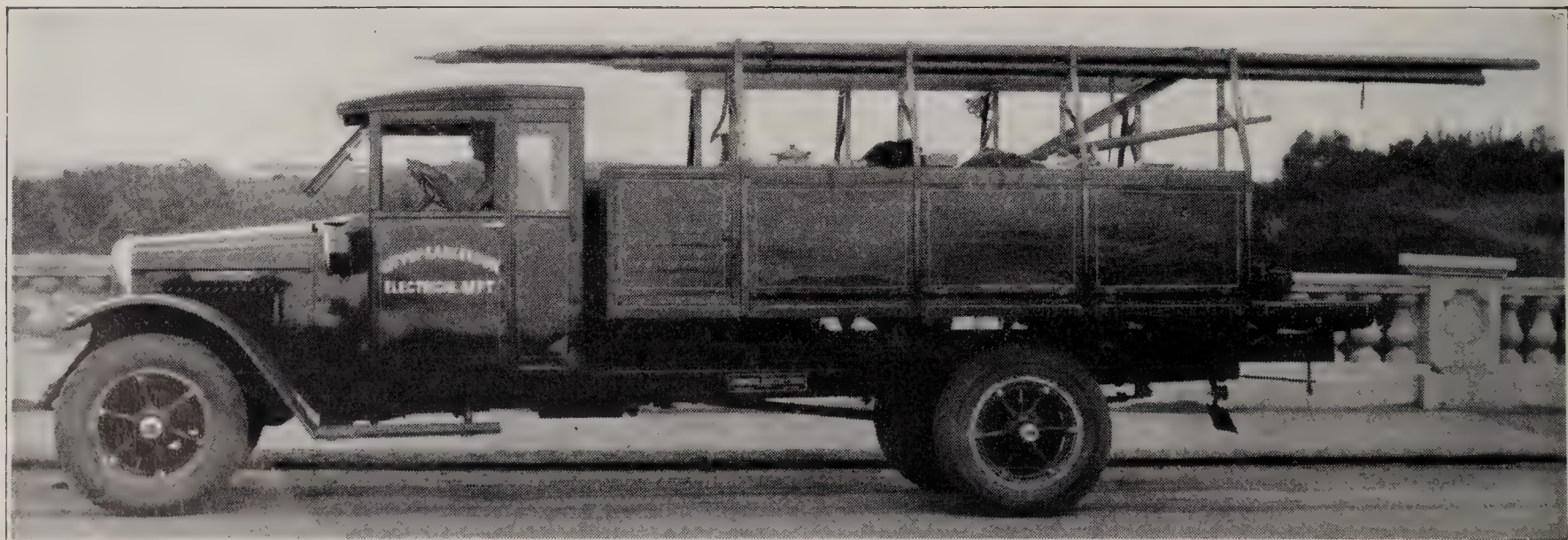
*Light trucks for light delivery work.*  
Capacity, 1500 lbs.



*Dump bodies for all sizes.*  
Capacity, 4000 to 6000 lbs.



*Special platform bodies can be supplied.*  
Capacity, 6000 to 10,000 lbs.



*Municipalities in all parts of Canada are buying Internationals for all kinds of city service.*





# McCormick-Deering and International Twine

Now Made in Canada

## Put Up in Eight-Pound Balls

All brands of twine bearing the trade names McCormick-Deering or International are now put up in balls weighing 8 pounds net each, six balls to the bale. A 6-ball bale contains exactly the same number of feet and weighs the same number of pounds as the old style 10-ball bale. The outside measurements of the 8-pound ball are a trifle larger than the old style 4.8-pound ball, but two of the 8-pound balls will easily fit any standard binder twine can.



*Illust. 1—Each ball weighs 8 pounds net. Six balls make a bale.*

The 8-pound ball contains  $66\frac{2}{3}$  per cent more twine than the old style ball, and in using a bale of 8-pound balls it is necessary to replenish the twine can only three times. A bale containing six 8-pound balls occupies about 40 per cent less cubic space than a bale containing ten 4.8-pound balls.

A patented cover, which is part of the ball itself, prevents the ball from collapsing, and all the twine is run out without tangling.

## Full Length—Full Strength

Every brand of twine bearing the trade name McCormick-Deering or International will be found full length, of uniform size, free from bunches or thin spots, and strong enough to bind all kinds of grain in all sorts of binders with a minimum of breakage. These brands of twine do not kink or snarl. They are made with maximum lengths per

pound. All brands are treated against destruction by insects.

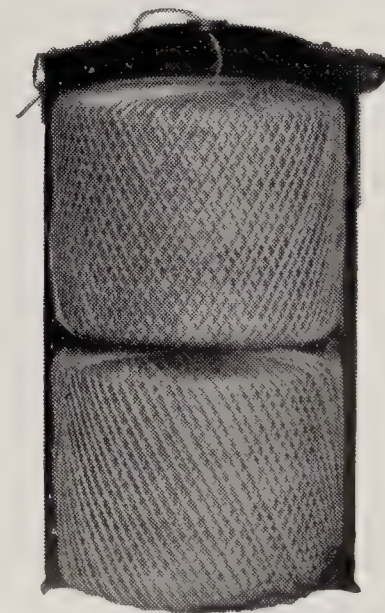


*Illust. 2—The patented cover which does not collapse, even after practically all the twine has been used out of the ball.*

The utmost care is taken to see that only the most perfect fibre is used. As the twine is made it is treated to preserve the fibre and to protect it against moisture. Samples of the finished twine are taken frequently and tested to see that it runs uniformly as to length and weight and each sample is given a breaking test to make sure that it is far in excess of the required strength.

Accurate operation of many good grain binders is threatened by some brands of inferior twine.

The Harvester Company meets its obligation by supplying the farmer with binder twine of unsurpassed quality.



*Illust. 3—Two 8-pound balls fit any twine can.*

## Brands and Lengths

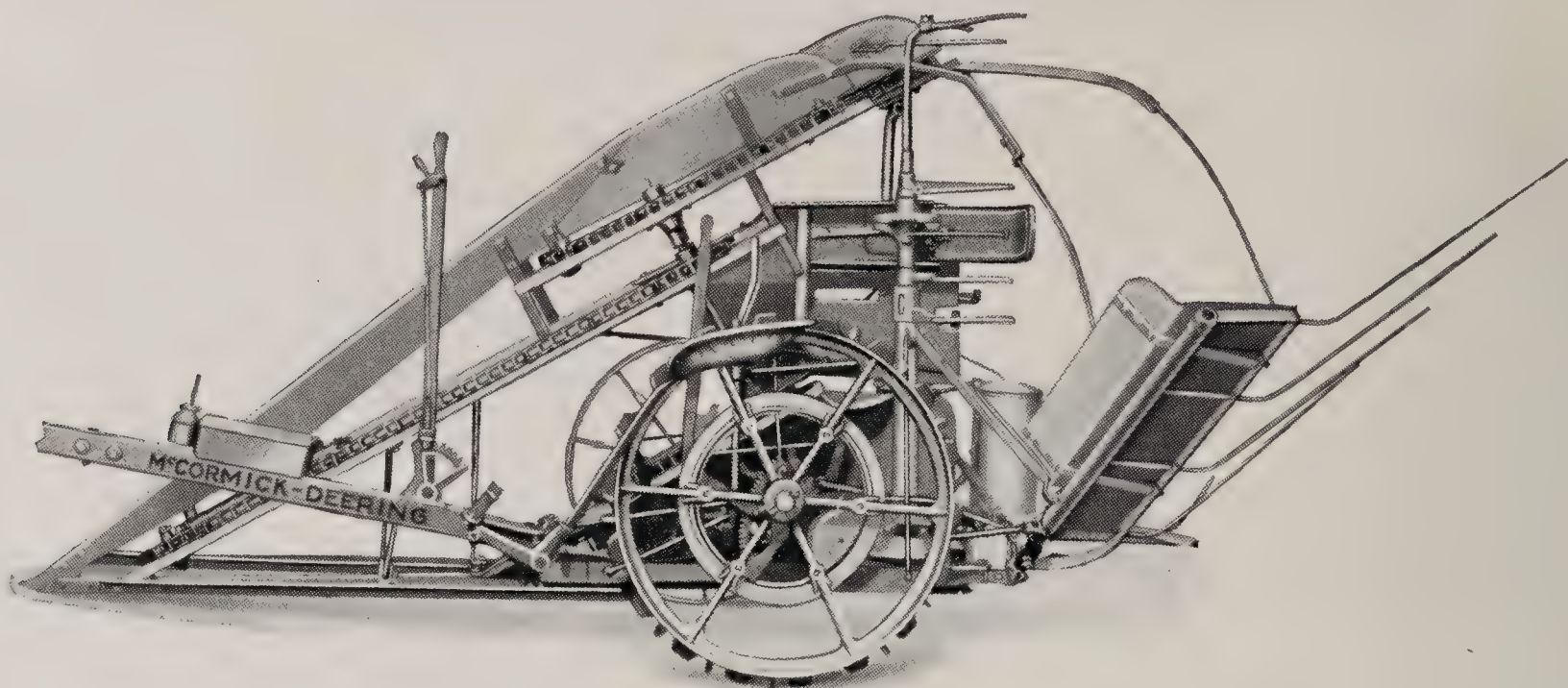
Brands	Length Per Lb., Feet
Standard.....	500
Standard Manila.....	550
Manila.....	600
Superior Manila.....	650

All brands are packed in 50-pound bales, 2 pounds tare.





## McCormick-Deering Corn Binders



*Illust. 1—Main wheel side of McCormick-Deering Vertical Corn Binder.  
Note the easy access to the interior of the machine.*

### Built for Long Service

The McCormick-Deering corn binder is an easy pull for horses, because the frame and many other parts are built of steel instead of iron. All bearings which would otherwise cause heavy draft are roller bearings. The lugs on the wheels assure good traction and the machine cuts both heavy and light corn equally well.

### Regular and Short Corn Binders

The vertical corn binders are made in two styles, the regular for corn of normal height and the short corn binder for those territories where corn does not grow tall. Both binders are designed to pick up down and leaning stalks and to bind the bundles in an upright position. These are laid on the ground gently and do not break off the ears.

### Internal Gear Drive

The McCormick-Deering binder has a positive gear drive which eliminates all chain trouble. The main driving gear is an internal gear attached to the main wheel and the pinion meshing with this gear transmits the power to other parts of the machine. The gear teeth are heavy, insuring great strength and long wear, and the internal type assures part of three teeth being always in mesh while with an external gear only one tooth is entirely in mesh.

### Dependable Binding Attachment

The binding attachment on the corn binder operates on the same general principle as the binding attachment of the grain binder. It is just as dependable. The knotter ties accurately every

time, and uses the minimum amount of twine. Adjustments can be made to put the band near the center of the bundle in either tall or short corn.

### Vital Parts Easily Accessible

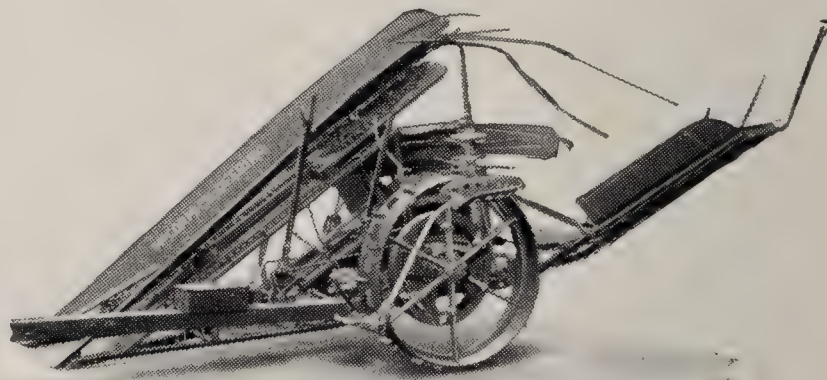
An important feature of this corn binder is the accessibility of all parts. The operator can reach into the machine from the grain wheel side and remove undergrowth, and adjustments of the knives can be made easily without removing the other parts of the machine.

### Regular Equipment

Tongue and three-horse evener. Bundle carrier. Tools.

### Extra Equipment

Conveyor bundle carrier. Kaffir corn attachment. Wide tired grain wheel (4-inch). Mud lugs for main wheel. Two-wheel tongue truck. Bundle loader. Corn borer attachment.



*Illust. 2—McCormick-Deering Short Corn Binder, a machine designed for territories where only short corn is raised.*

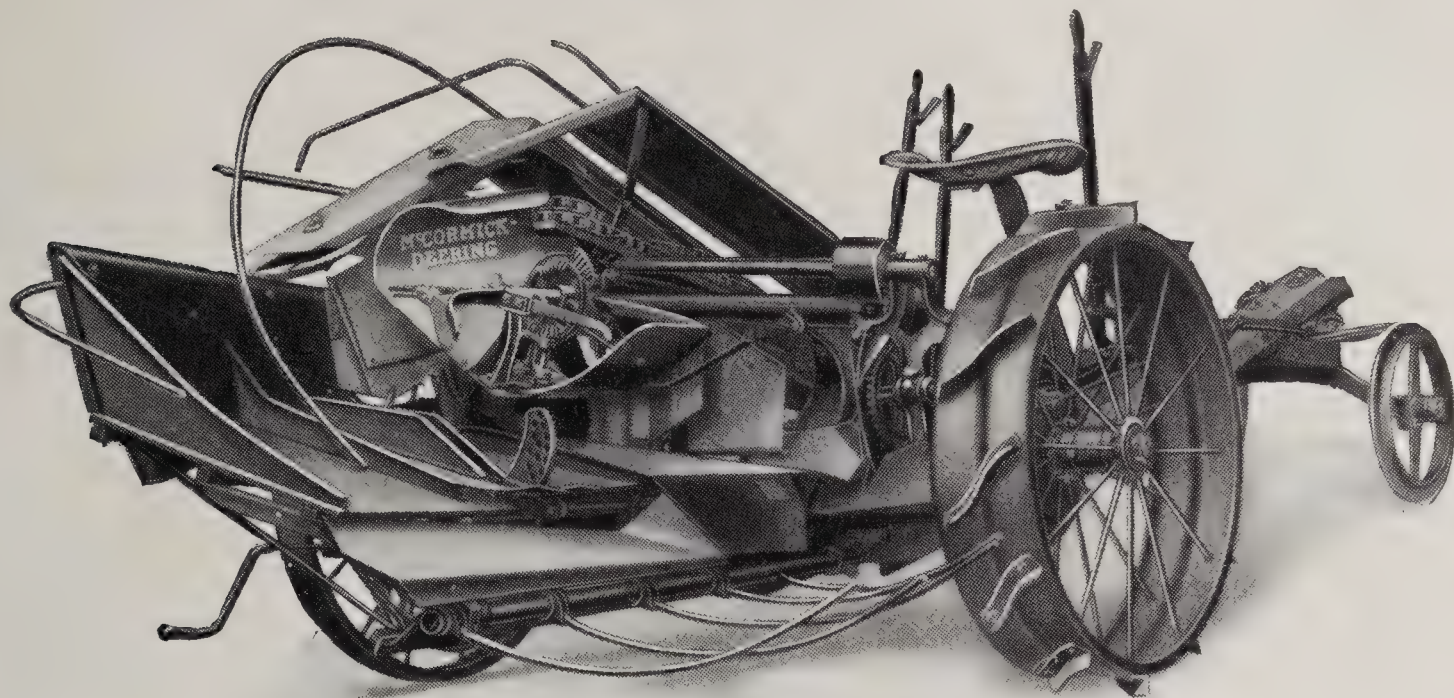
### Specifications—McCormick-Deering Vertical Corn Binders

Kind of Binder	Main Wheel		Grain Wheel		No. of Horses	Range of Butt Pan Adjustment	Shipping Weight	
	Height	Width Face	Height	Width Face			With Reg. Carrier	Without Carrier
Regular	36 inches	8 inches	32 inches	3 inches	3	12 inches	1670 lbs.	1595 lbs.
Short	36 inches	8 inches	32 inches	3 inches	3	12 inches	1485 lbs.	1410 lbs.





## McCormick-Deering Corn Binders



*Illust. 3—The McCormick-Deering horizontal Corn Binder will cut from five to seven acres of corn per day.*

### Indispensable for Silage

The McCormick-Deering corn binder probably finds its greatest use in cutting corn for silage. It can cut from five to seven acres per day, keeping pace with the ensilage cutter so that the corn reaches the cutter in good condition for silage.

### Reduces Work of Harvesting

For cutting corn to be shocked the machine is a great labor-saver, because it will do the work of from five to seven men and with much less effort. Corn is one of the most difficult crops to harvest by hand because when the stalks are damp, they are very difficult to cut with a corn knife, but the corn binder can go into the field regardless of conditions and cut corn from daylight until dark.

### Steel Construction—Light Draft

The McCormick-Deering corn binder is built almost entirely of steel and for this reason is not an exceptionally heavy machine to pull. Three horses can handle it in all average conditions. Ball

and roller bearings are supplied for all parts that are subject to any great amount of friction. This means light draft.

### Harvests Corn in All Conditions

No matter whether the corn is short or tall, leaning or down, the McCormick-Deering corn binder can be adjusted to harvest it all in good condition. The gatherer boards can be lowered so that they will raise the leaning corn to a vertical position. It can also be adjusted to cut short corn or extra tall corn.

### Regular Equipment

Tongue. Neckyoke. Three-horse evener. Bundle carrier.

### Extra Equipment

Tongue truck (180 lbs.). Tractor hitch. Wide tire grain wheel. Bundle loader. Corn borer attachment.

### Specifications—McCormick-Deering Horizontal Corn Binder

Length Over All Without Tongue	Width Over All	Main Wheel		Grain Wheel		Capacity Acres per Day	Field Weight		Shipping Weight	
		Height	Width	Height	Width		With Carrier	Without Carrier	With Carrier	Without Carrier
11 feet 6 inches	6 feet	37 inches	9 inches	37 inches	3½ inches	5 to 7	1541 lbs.	1481 lbs.	1645 lbs.	1580 lbs.

\*Length with tongue truck, 14 ft. 6 in.





McCormick-Deering  
Ensilage Cutters

Illust. 1—McCormick-Deering Type F Ensilage Cutter is a popular seller throughout Canada.

Regular Equipment  
Types A, 12 and E

Steel trucks.  
Tractor hitch with horse tongue extension Types A and 12 only.  
Tongues for horses on type E.  
Steel flywheel  
Two sets of straight knives (3 knives for A and 4 for No. 12) and 2 knives in each set on E).  
Grindstone (A and E). Hard-oil cups.  
Reversible cutter bar. Deflector.  
Traveling conveyor. Pulley.

Types F and G

Truck with tongue for horses. Traveling conveyor.  
Steel flywheel. Deflector.  
Two sets of straight knives. Pulley.  
Reversible cutter bars.

Extra Equipment  
Types A, 12 and E

Blower pipe. Shredder bars. Distributor pipe.  
Curved knives. (2 in set for A and 12), (2 in set for E).  
Covered pulleys.  
Corn chute for feeding corn from wagon.

Type G

Curved knives. Shredder bars. Distributor pipe.  
Blower pipe. Covered pulleys.

Type F

Hand feed with extension table leaf.  
Extra knives, knife post adjustments and bolts to equip for four knives. (All knives straight.)  
Shredder bars—flywheel takes either 2 or 4 straight knives or 2 or 4 shredder bars which can be used independent of each other.  
Blower pipe. Distributor pipe. Covered pulleys.

Specifications—McCormick-Deering Ensilage Cutters

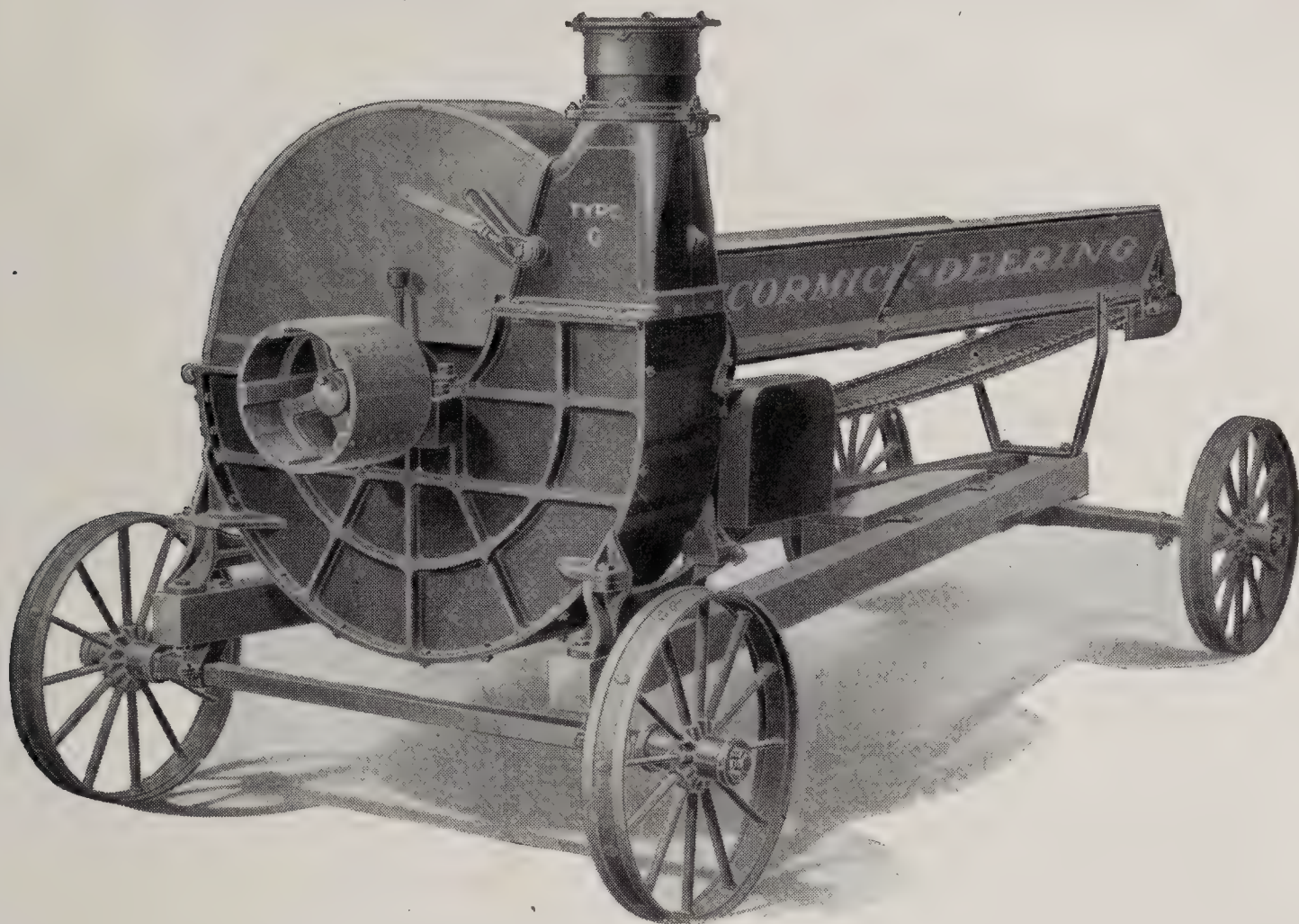
	Cap. Tons per Hour, ½-in. Cut, Cutting or Shredding	H. P. Required Kerosene or Gas. Engine	Revolutions per Minute	Diam. Flywheel, Inches	Diam. Flywheel Shaft, Inches	Throat Width, In.	Throat Hgt., In.	Lengths of Cut, Inches	Reg. Pulley (Covered)			Special Pulley (Covered)			Weight
									Cat. No.	Diam., in.	Face, In.	Cat. No.	Diam., In	Face, In.	
Type A	16 to 25	20 to 25	500 to 700	48	2¼	16	6½	{ ¾ ½ ¼ 1 }	231-L Special on B	14	9	{ 232-L 234-L 235-L 249-L }	13 11 16 18	{ 9 }	2,475 lbs.
No. 12	12 to 16	15 to 20	700 to 800	42	2¼	14	5½		233-L Special on A	12	9				
Type E	10 to 12	10 to 15	800 to 900	36	1¾	11	5½	Two Knives ¾—½—¾—1	392-L	10	8	{ 391-L 393-L 394-L 395-L 396-L 397-L 398-L 275-L }	11 9 8 7 14 13 12 16	{ 8 8 8 8 8 8 8 8 }	1,745 lbs.
Type G	8 to 10	8 to 10	800 to 900	36	1¾	11	5	Types G and F—Two Knives ¾—½—¾—1	392-L	10	8				
Type F	3 to 6	4 to 6	800 to 900	30	1½	9	3	With Four Knives on Type F Shorter Lengths Are Cut	1127-L	8	6	{ 1126-L 1128-L 1129-L }	7 9 10	{ 6 6 6 }	On Trucks, 1,225 lbs. On Skids, 925 lbs.

Size of Truck Wheels—Type A, 3-in. tire, 26-in. rear wheel, 24-in. front wheel; No. 12, 3-in. tire, 24-in. rear wheel, 22-in. front wheel; Types E, G and F, 3-in. tire, wheels 22-in. front and rear.





## McCormick-Deering Ensilage Cutters



*Illust. 2—McCormick-Deering Type G Ensilage Cutter is slightly larger capacity than Type F.*

### Type F Cutter

The Type F McCormick-Deering ensilage cutter is built for average individual needs—for the man with an engine of 4 to 6 horse-power. At the normal speed of the flywheel, 900 r. p. m., you can elevate the ensilage 30 feet or better with ease. The flywheel being built of boiler plate, is safe at any speed, yet heavy enough to insure uniform cutting and high throw without extra exertion on the part of the engine.

### Type G Cutter

This machine has much the same construction as the Type F. It is larger and traveling conveyor rests permanently on the frame, the cutter being belted crosswise of the ground wheels. Both the F and G are simple as ensilage cutters can be. They are light in weight, require small space for storage and are very economical to operate.

### Frames

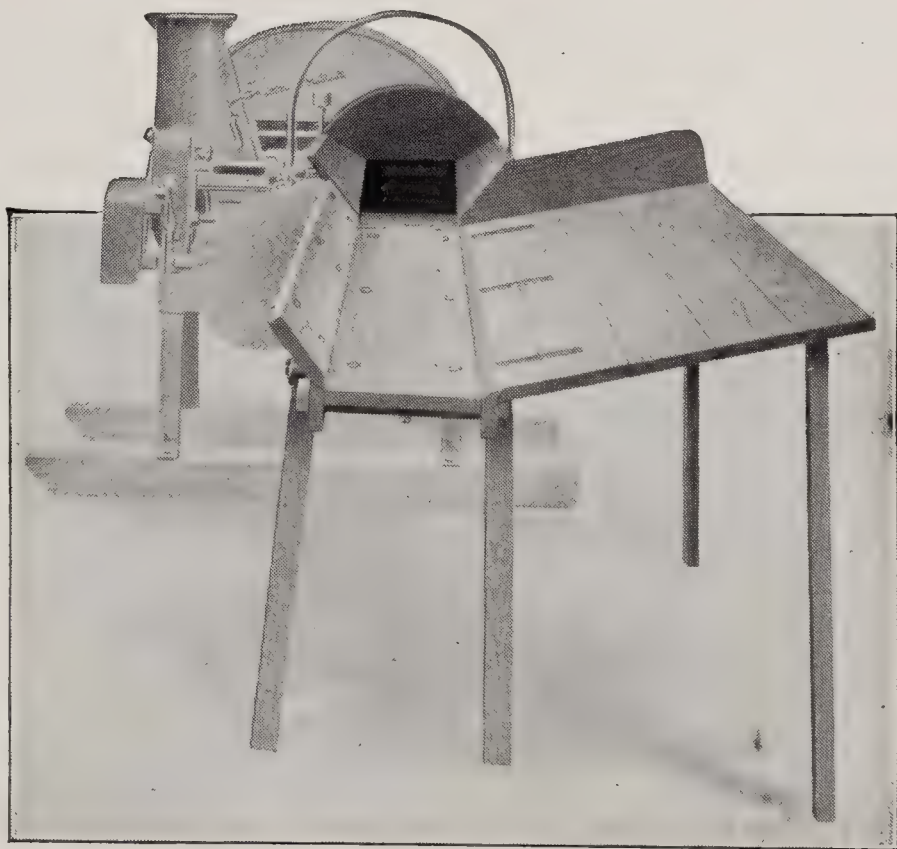
The heavy wood frames on both the Types F and G cutters are solidly joined, bolted and braced. They form a firm and rigid foundation for the working parts.

### Traveling Conveyors

Regularly supplied on Types F and G cutters. All conveyors are made of steel with upturned edges to force the stalks into the cutting mechanism.

### Skid Mounting

The special skid mounting shown in Illust. 3 may be had for either the Type F and G machines on special order.

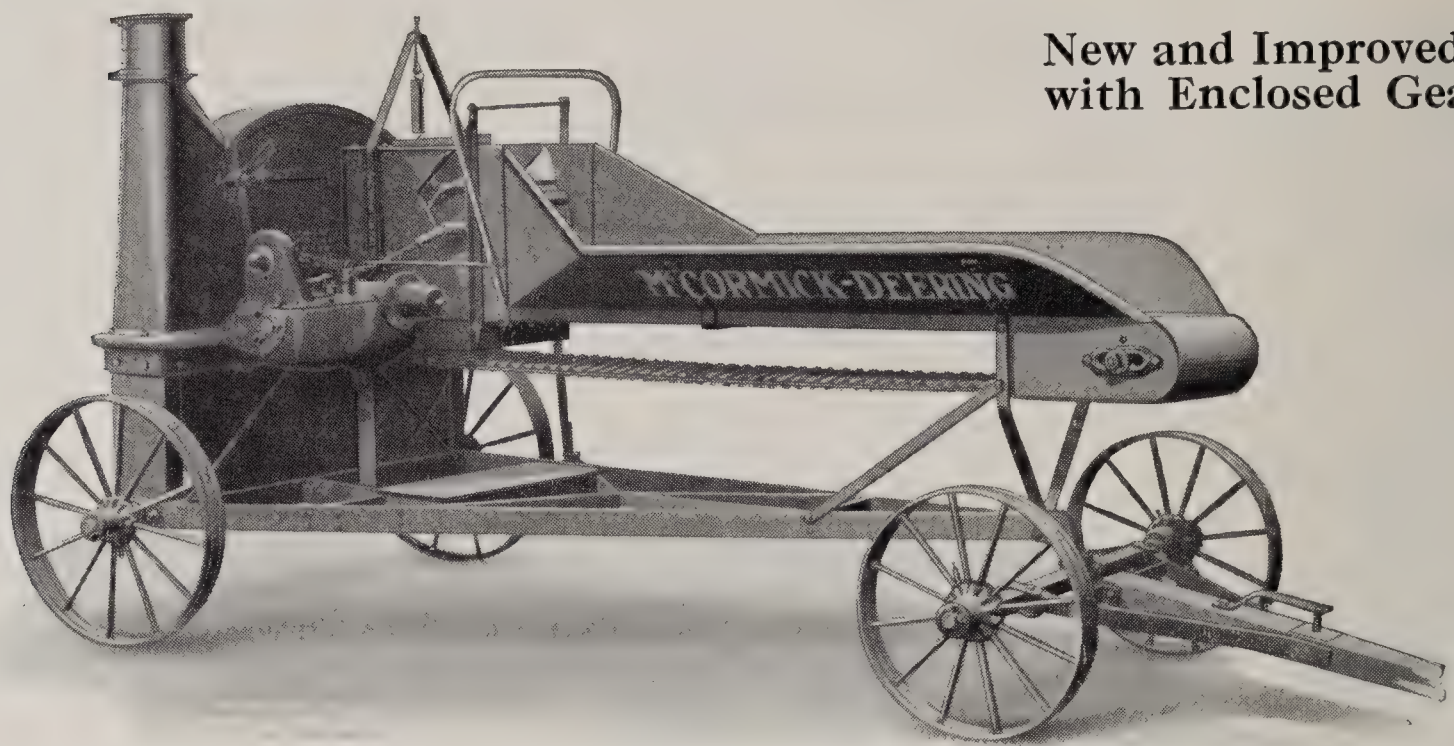


*Illust. 3—Special equipment for Type F—skid mounting, hand feed table, and extension feed table leaf. Supplied on special order.*





## McCormick-Deering Ensilage Cutters



New and Improved  
with Enclosed Gears

*Illust. 4—McCormick-Deering No. 12 Ensilage Cutter. A new and improved type with enclosed gears and many new features. Typical of the three larger sizes, types A, 12 and E.*

### Steel Main Frame

Ensilage cutting requires rapid motion with consequent vibration. The mechanism can be kept in alignment only by a very rigid frame. This is important, as a variation of one-sixteenth inch due to being belted to a heavy engine continuously, means severe strain on the entire mechanism. No binding of gears on McCormick-Deering cutters. On the larger cutters, Types A, 12 and E, all-steel main

frames are used. They consist of heavy channel steel, hot riveted under tremendous pressure in a special die or holder. Cross sills of heavy bar steel and truss braces under the frame prevent sagging and twisting. And the frame is so divided that the weight of the mechanism is evenly divided in relation to the flywheel shaft.

### Safety Features

Shaft with key forced into boiler-plate flywheel by hydraulic pressure.

Complete machine severely tested before leaving factory.

Knife adjustments double-nutted.

Fans are malleable and firmly riveted to boiler-plate flywheel.

Shearing strain put on knife posts—not on knife bolts.

Offset on feed roll casting prevents point of knife from striking cutter bar.

Intake part of feed throat is guarded.

Ends of shafts in protected positions.

Apron feed at outer end is protected by lower end of corn chute.

Low speed of flywheels.

Trucks are regular on all McCormick-Deering ensilage cutters. They can be easily removed, however, if desired. All wheels are strongly made, with oval spokes and channel rims. Front wheels can be completely turned under allowing sharp turns and good bracing, still leaving ample room for the conveyor.

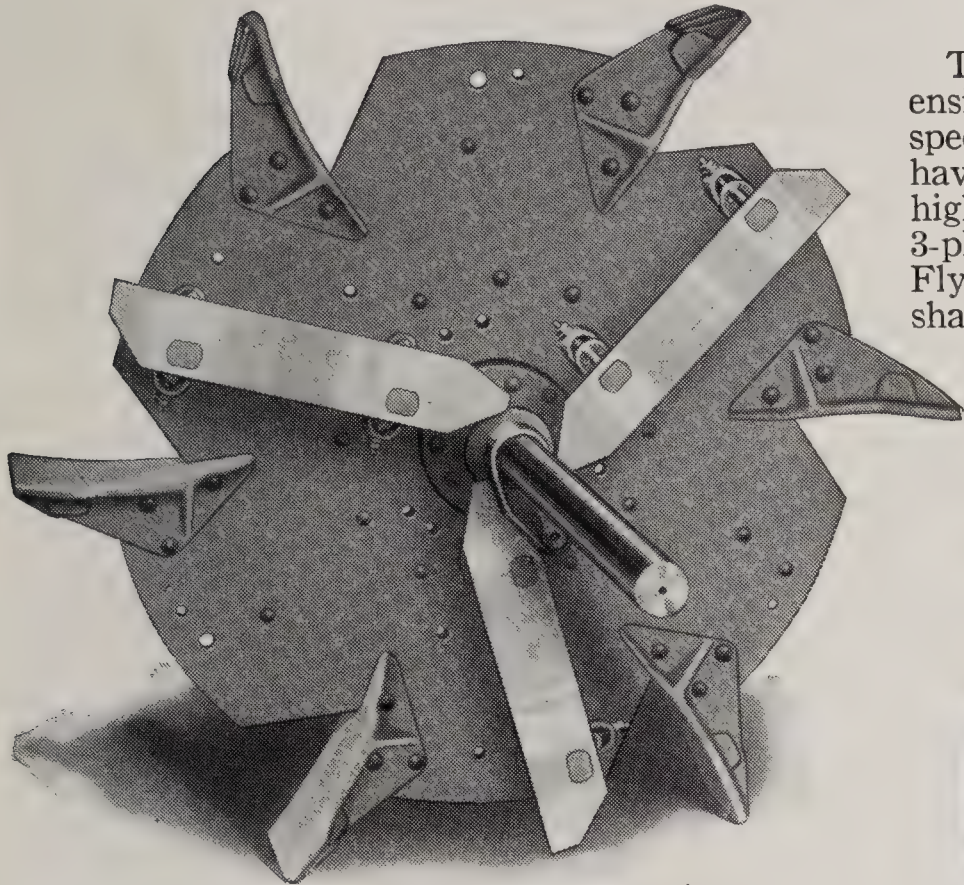


*Illust. 5—Control lever acting as safety device. Reaching forward causes pressure against the lever, throwing the machine out of gear. The lever can be reached from either side of the feed table.*





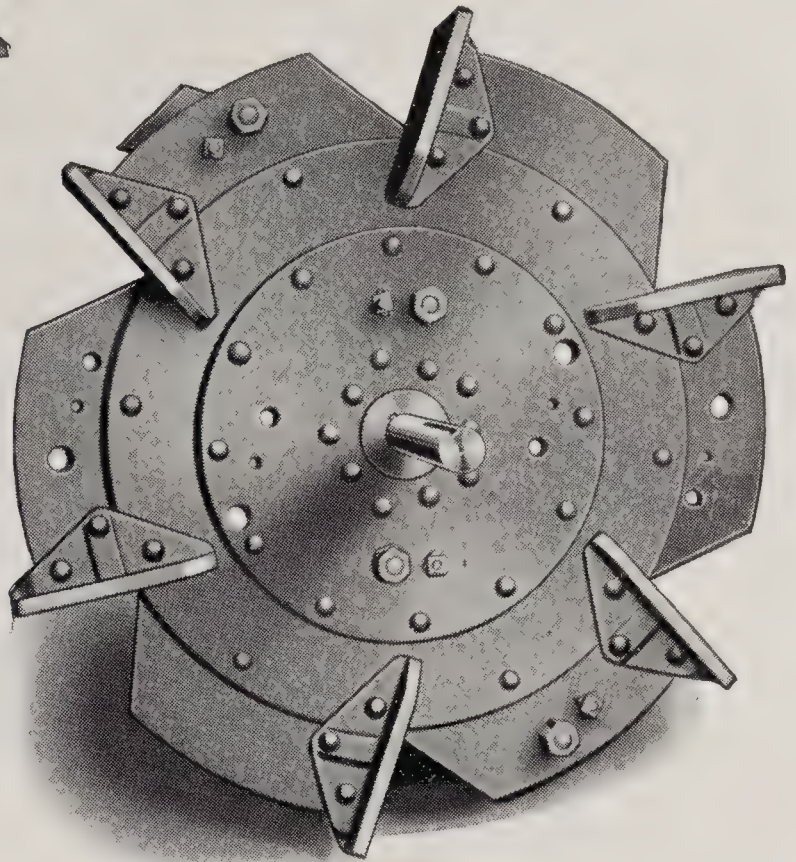
## McCormick-Deering Ensilage Cutters



*Illust. 6—Flywheel cuts, throws and blows at one operation. Fans throw the cut ensilage part way up the pipe and then the powerful air blast elevates it the rest of the way.*

### Flywheel Built of Boiler Plate

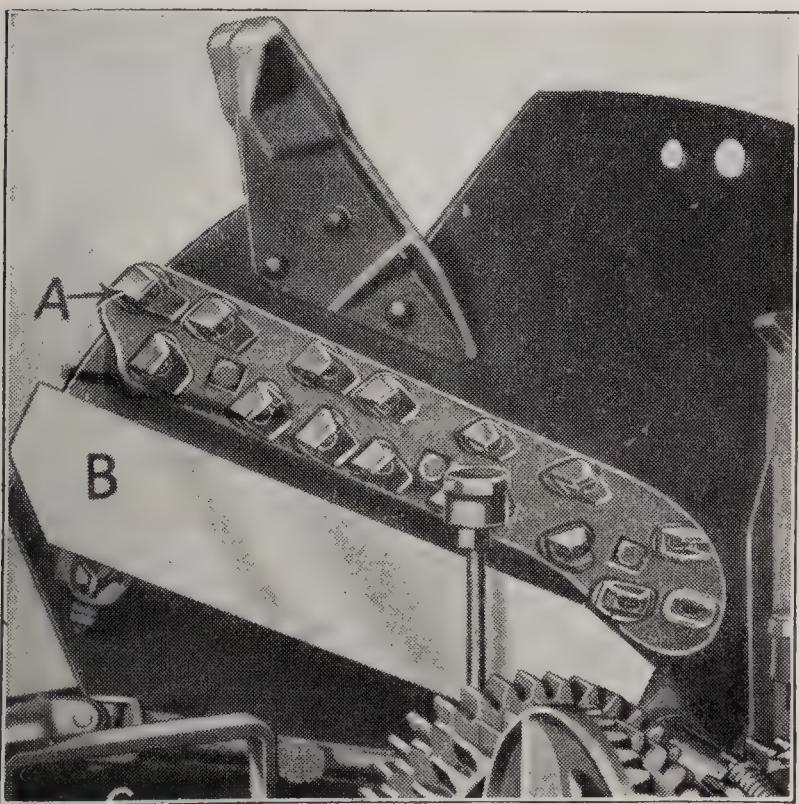
The steel flywheel on McCormick-Deering ensilage cutters means safety under all working speeds. At the same time it is heavy enough to have plenty of momentum, insuring a continuous high throw. The steel plates, riveted together, are 3-ply in all sizes except the Type F which are 2-ply. Flywheel is riveted to a steel hub, into which the shaft is forced by a hydraulic press and keyed.



*Illust. 7—Back side of steel flywheel showing overlapping boiler plates and heavy bolting.*

### Shredder Bars

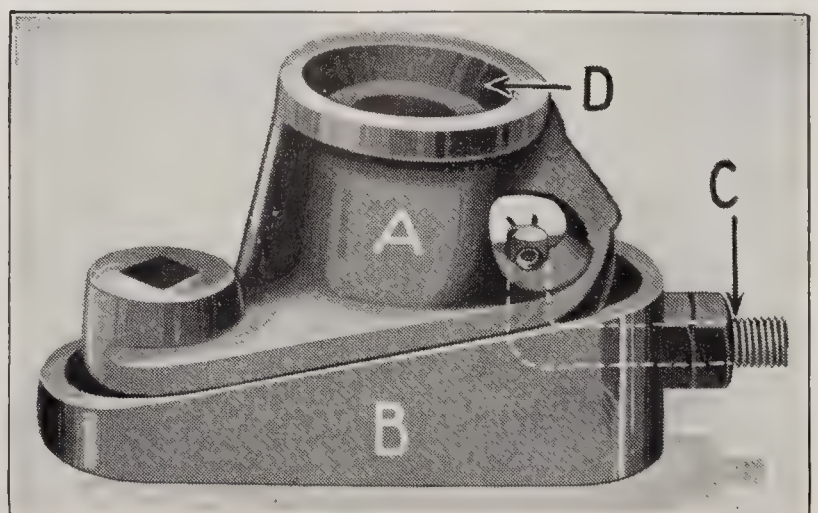
All McCormick-Deering ensilage cutters shred as well as cut—by using shredder bars supplied on special order, either with or without straight knives. The shredding capacity is practically the same as the cutting capacity. When shredder bars are used with knives, straight knives only will fit.



*Illust. 8—Shredder bar A and straight knife B can be used on all McCormick-Deering cutters with knives or without, as desired. Straight knives only can be used with shredder bars.*

### Fans

All sizes have six fans except Type F which has four. They give a continuous blast in the blower pipe, and being malleable will bend before breaking. They are solidly riveted to the boiler plate. All fans or wings are large and wide, and deliver a steady blast of air up the blower pipe that will carry the heaviest load of cut silage.

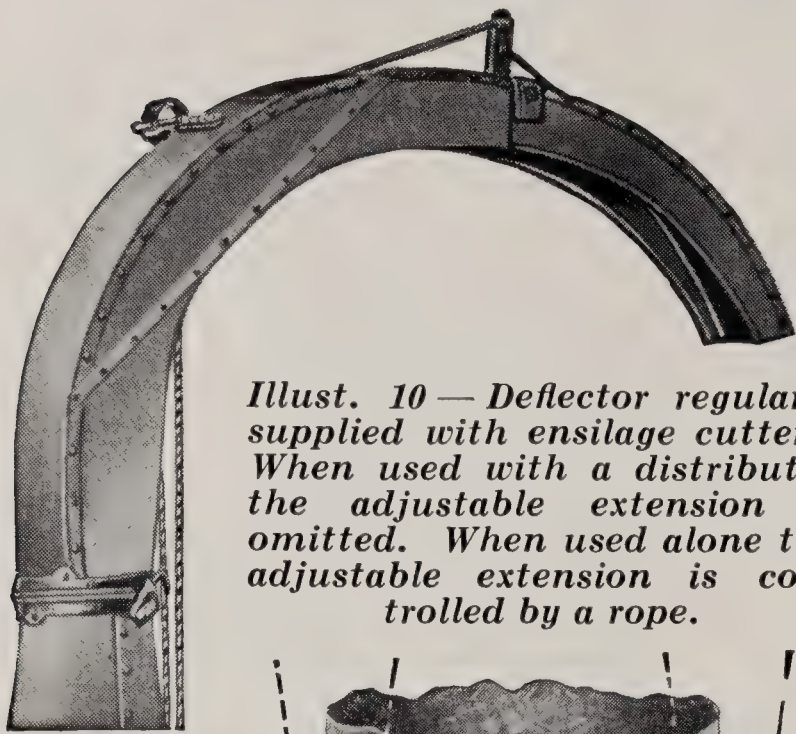


*Illust. 9—Knife adjustment—practically the same on all types. Knife adjusted to or from cutter bar by loosening or tightening double nuts on bolt C.*

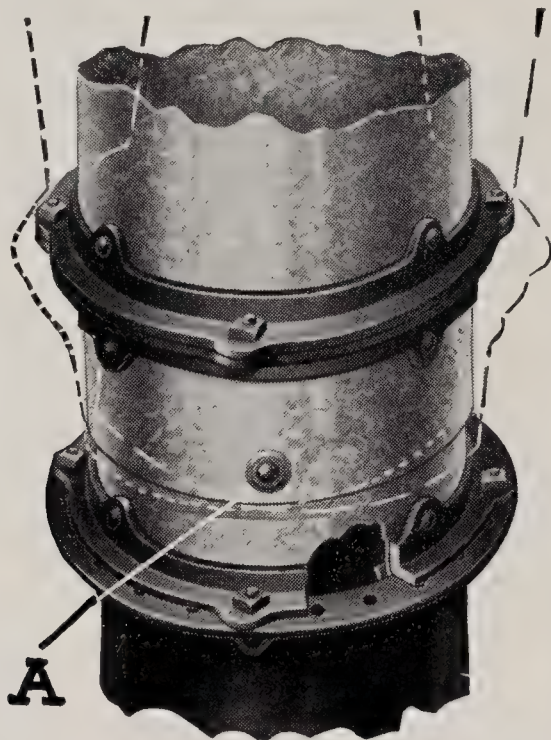




## McCormick-Deering Ensilage Cutters




*Illust. 10 — Deflector regularly supplied with ensilage cutters. When used with a distributor the adjustable extension is omitted. When used alone the adjustable extension is controlled by a rope.*



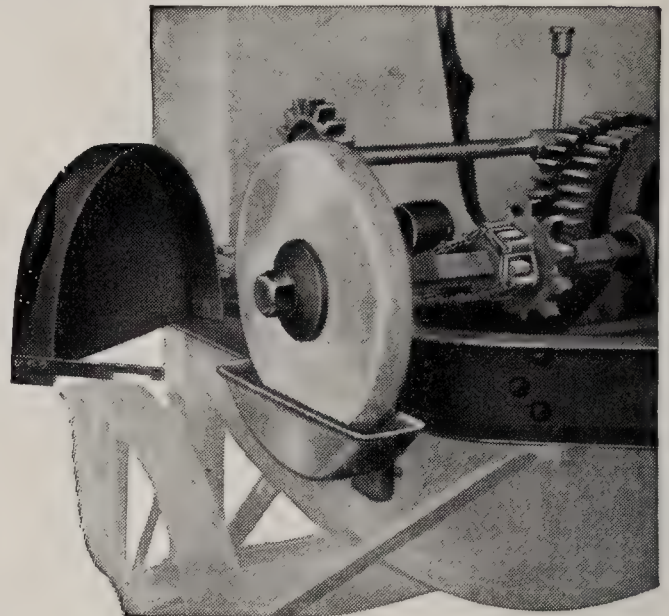
*Illust. 11—Flexible joint of blower pipe permits proper tilting of pipe toward silo. Furnished regularly on all cutters.*



Hopper Joint, 3 feet long. One used.

 Regular Joint distributor pipe extension, 3 feet long. Used as required—number varies according to height of silo.

*Illust. 12 — Complete distributor is alike on all types and will be furnished on special order. Additional lengths of distributor pipe can be added as required.*



*Illust. 13—Knife grinding attachment. This is part of regular equipment on cutters A and E. Can be ordered extra for other sizes. It is mounted on the bevel gear shaft.*

### Extra Belt Pulleys (All Covered)

Type	No.	Diam.	Face	Bore
A	232L	13-in.	9-in.	2 1/4-in.
	233L	12-in.	9-in.	2 1/4-in.
	234L	11-in.	9-in.	2 1/4-in.
	235L	16-in.	9-in.	2 1/4-in.
	249L	18-in.	9-in.	2 1/4-in.
12	231L	14-in.	9-in.	2 1/4-in.
	232L	13-in.	9-in.	2 1/4-in.
	234L	11-in.	9-in.	2 1/4-in.
	235L	16-in.	9-in.	2 1/4-in.
	249L	18-in.	9-in.	2 1/4-in.
E and G	391L	11-in.	8-in.	1 3/4-in.
	394L	8-in.	8-in.	1 3/4-in.
	393L	9-in.	8-in.	1 3/4-in.
	395L	7-in.	8-in.	1 3/4-in.
	396L	14-in.	8-in.	1 3/4-in.
	397L	13-in.	8-in.	1 3/4-in.
	398L	12-in.	8-in.	1 3/4-in.
	275	16-in.	8-in.	1 3/4-in.
F	1126L	7-in.	6-in.	1 1/2-in.
	1128L	9-in.	6-in.	1 1/2-in.
	1129L	10-in.	6-in.	1 1/2-in.

### Galvanized Blower Pipe (Extra Equipment)

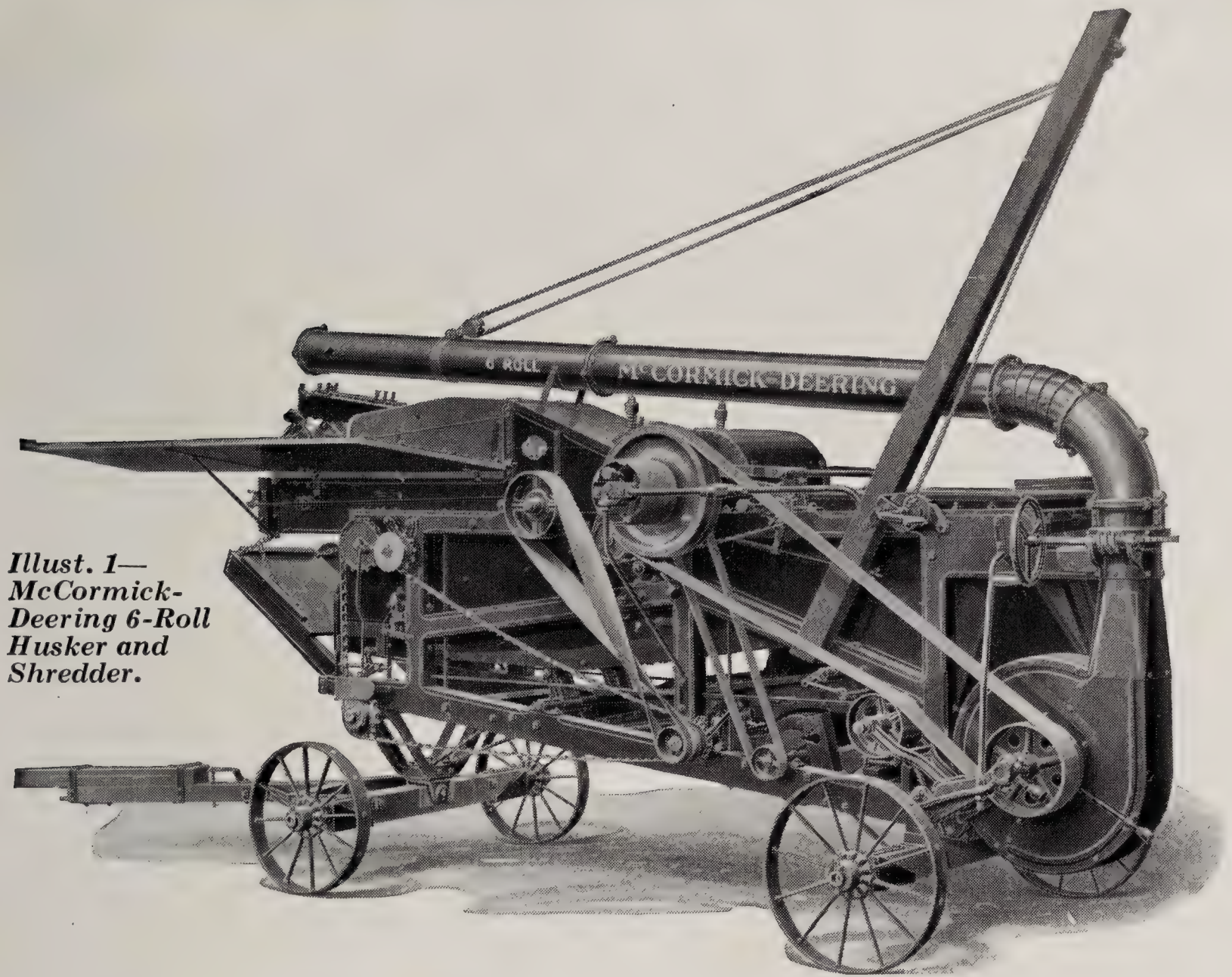
Lengths	Types A and B 9 in. Diameter Cat. No.	Types E and G 7-in. Diameter Cat. No.	Type F 6-in. Diameter Cat. No.
1-ft.	194LA	827L	1180L
4-ft.	195LA	828L	1181L
6-ft.	196LA	829L	1182L
8-ft.	197LA	830L	1183L
10-ft.	198LA	831L	Not supplied

Distributor pipe for use inside the silo is made up as follows: hopper joint 3 feet long as illustrated at the left, and additional 3 foot lengths of distributor pipe to the number needed. Hopper joint fits over the regular deflector which goes with the machine, and distributor pipe sections fit together with flexible connections so that pipe can be carried around inside the silo. Joints can be removed as the ensilage rises in the silo.





## McCormick-Deering Huskers and Shredders



*Illust. 1—  
McCormick-  
Deering 6-Roll  
Husker and  
Shredder.*

### Backed By Experience

McCormick-Deering huskers and shredders have more than 28 years of husker and shredder building experience back of them.

They are built of high-grade materials throughout.

All McCormick-Deering huskers and shredders are provided with self-feeders.

All levers for controlling both snapping and husking rolls and self-feeder are conveniently located.

All working parts are protected by shields.

All hard oilers have long stems.

The snapping rolls do effective work, pressure between them is regulated by adjustable springs.

### Regular Equipment (4, 6, 8 and 10-roll)

Saw-tooth shredder head, self-feeder. Ear corn elevator, shelled corn elevator, swinging blower, pulleys (see pulley list) 20 feet of blower pipe with 4, 6 and 8-roll. Swinging, telescoping blower on 10-roll. Stub tongue and extension (for tractor or horses on 6, 8 and 10-roll) horse tongue on 4-roll.

### Extra Equipment

Additional lengths of blower pipe for 4, 6 and 8-roll. Cutter head for 4, 6 and 8-roll. (Illust. No. 8). Knife shredder head (Illust. No. 9). Knife grinder for shredder head. Distributor pipe for use in silos (6 and 8-roll).

### Specifications—McCormick-Deering Huskers and Shredders

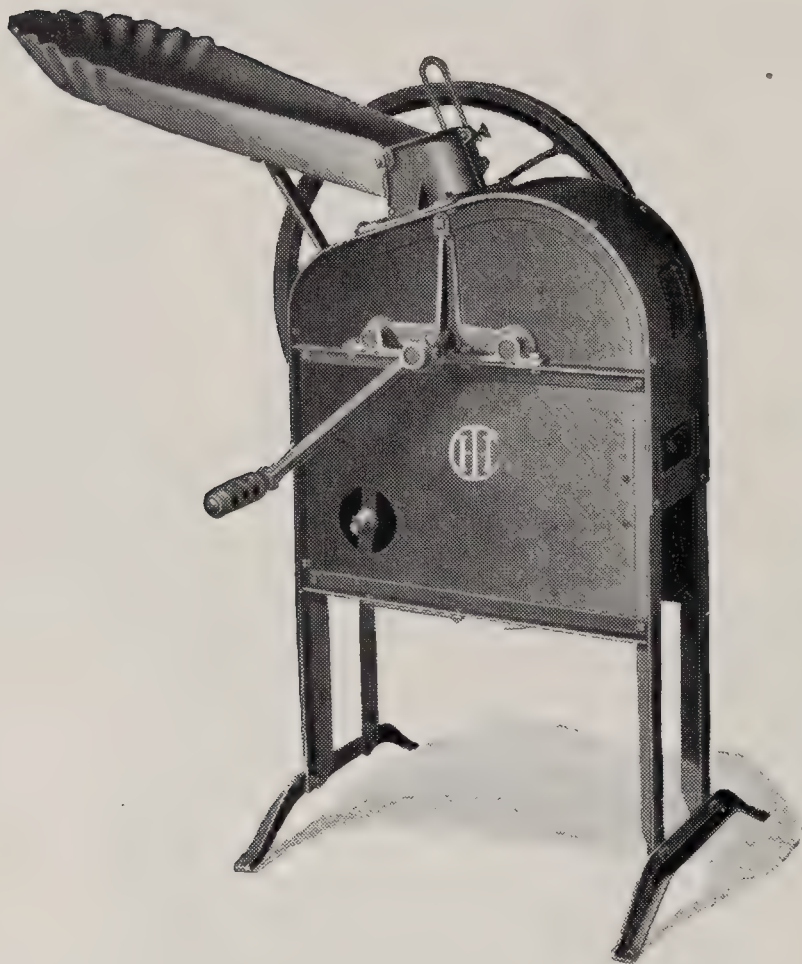
Sizes	Speed Rev. per Minute	Horse Power Kerosene Engine	Capacity—* Bushels of Ear Corn per Hour	Shipping Weight Lbs.	Diameter of Head Inches	Working Length of Snapping Rolls Inches	Diameter Snapping Rolls Inches	Number of Husking Rolls	Length of Husking Rolls Inches	Diameter of Husking Rolls Inches	Blower	Diameter of Blower Pipe In.	Leng. Blower Pipe Feet	Trucks		
														Wheel Face	Diam. Front Wheels In.	Diam. Rear Wheels, In.
4-roll	1000	10 to 15	20 to 35	2300	12	13 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>4</sub>	4	36	2 <sup>1</sup> / <sub>2</sub>	Swinging	7	20	3	22	26
6-roll	1000	12 to 16	30 to 45	3200	12	17 <sup>1</sup> / <sub>2</sub>	3 <sup>1</sup> / <sub>4</sub>	6	36	2 <sup>1</sup> / <sub>2</sub>	Swinging	7	20	3	22	24
8-roll	1000	15 to 20	50 to 75	4580	12	23	3 <sup>1</sup> / <sub>2</sub>	8	36	2 <sup>1</sup> / <sub>2</sub>	Swinging	9	20	4	26	26
10-roll	1000	20 to 30	80 to 100	6500	12	33	3 <sup>1</sup> / <sub>2</sub>	10	46 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	Swinging	13	20	6	26	34

\*Based on average conditions in corn belt.





## McCormick-Deering Corn Shellers



*Illust. 1—McCormick-Deering One-hole Corn Sheller equipped with fan.*

### For Shelling Seed Corn

The McCormick-Deering one-hole hand sheller is especially desirable for shelling seed corn. It does not break the kernels or the cobs, and the fan, which will be supplied, thoroughly cleans the corn so that it is delivered from the machine in fine condition for planting.

### Corn Not Crushed in Shelling

The picker and stripping wheels are so made that the corn will not be crushed between the teeth. The gear teeth on the picker wheel are open at the bottom so that in case corn gets into them it will not be crushed. This also largely eliminates the danger of breaking gear teeth from stones or other foreign matter which may get into the sheller with the corn.

### Regular Equipment

Crank Handle  
Feed Table  
Fan

### Extra Equipment

8-in. belt pulley for operation with engine

### Well-Fitted Parts

The bearings of the hand shellers instead of being cored out as in most low-priced shellers are carefully bored to exact size so that the shafts fit snugly and work smoothly. The shelling and picker wheels are not cast on to the shafts as in many shellers, but are keyed on so that they can be removed when repairs are necessary.

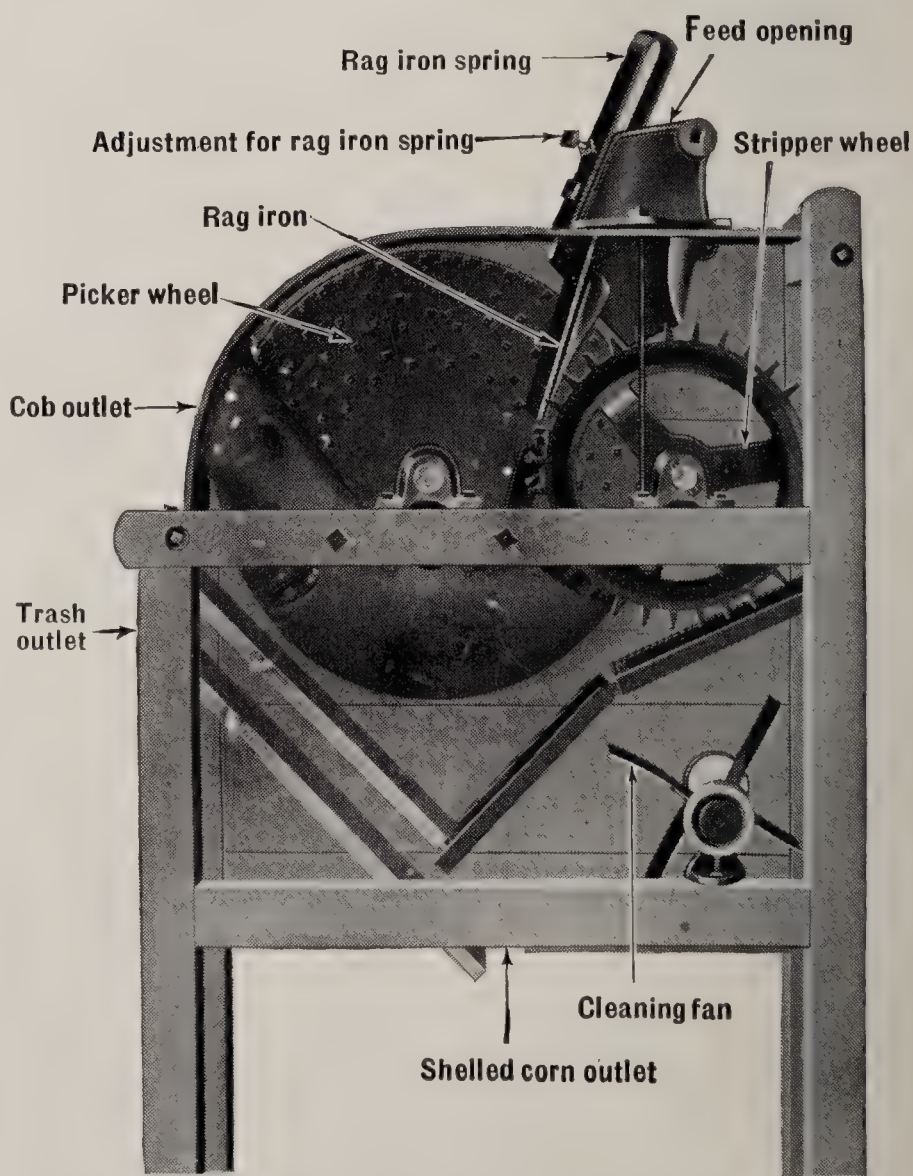
### Adjustable for Various Size Ears

The rag iron is attached to a spring and is adjustable for tension so that various size ears are shelled equally clean.

### Power Drive Available

It is an easy matter to attach a belt pulley to the fly wheel and the machine gives excellent service as a power sheller for feeding purposes on small farms. A one-horse-power engine will drive the sheller.

Size	Description	Approximate Weight
1-hole	Steel Pony Hand Sheller	130 lb.

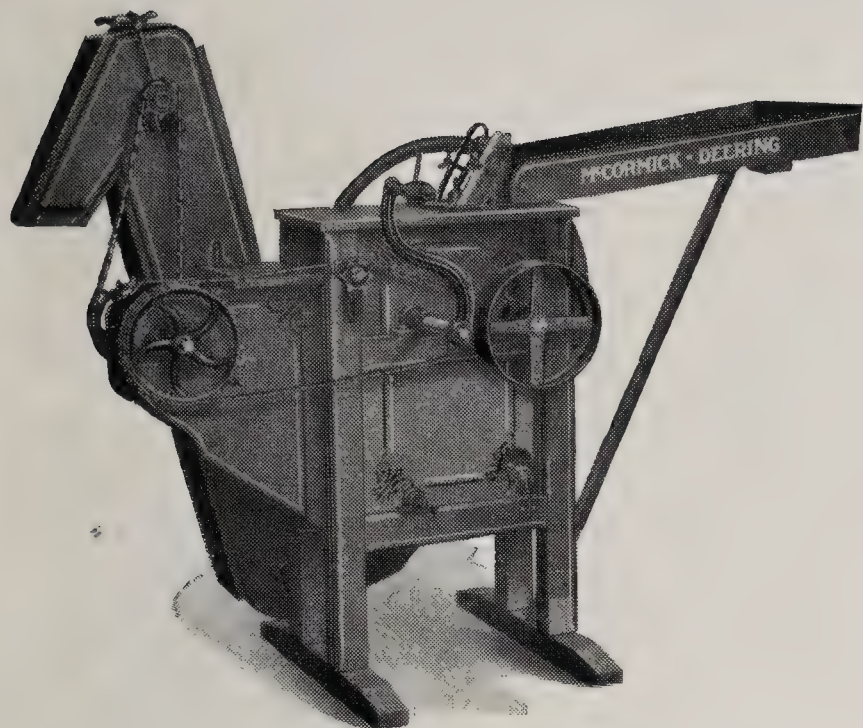


*Illust. 2—Interior construction, fly-wheel side.*





## McCormick-Deering Corn Shellers



*Illust. 3—McCormick-Deering XL Corn Sheller. Bagging elevator is extra.*

### Shells Clean

The general principle on which the McCormick-Deering Keynote sheller operates is by means of a picker wheel, both sides of which are filled with teeth and two picker shafts with spiral teeth. The picker wheel revolves the ears as they pass into the sheller and the picker shaft draws them in and shells off the kernels. The Keynote shells clean when run at full capacity and does not break the kernels or score the cobs.

### McCormick-Deering XL Sheller

The XL sheller is a two-hole machine either hand or power. It is built entirely of wood except the machine parts. The construction of the machine is similar to that of the one-hole hand sheller but it has two holes for shelling two ears at the same time. The machine is an excellent one for shelling corn for seeding on the average farm. It can be operated by hand power, but is also regularly supplied with a belt pulley for engine power. The bagging elevator shown in the illustration is furnished at slight additional cost.

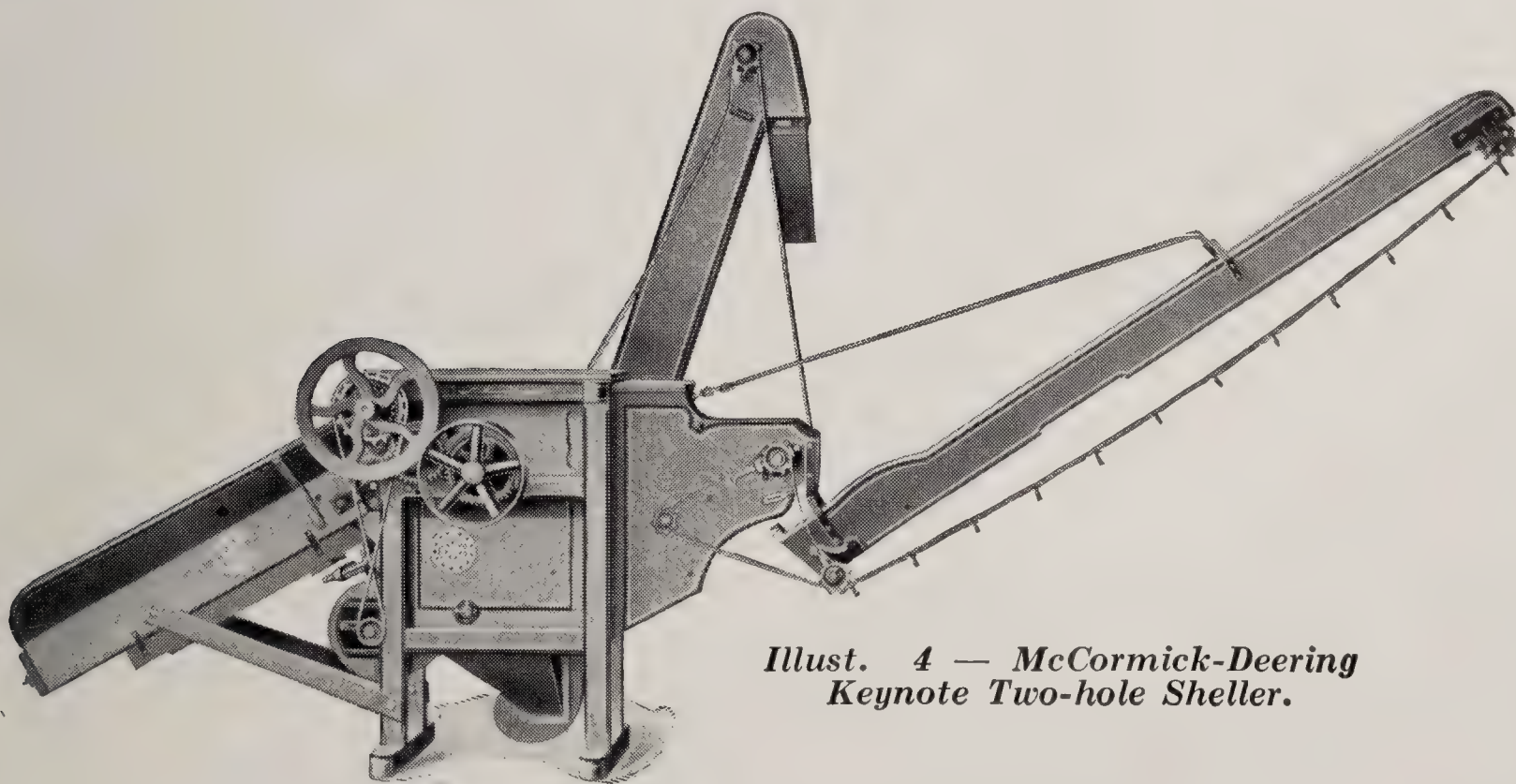
### McCormick-Deering Keynote Sheller

The McCormick-Deering Keynote sheller is especially adapted for large farms where a considerable quantity of corn must be shelled daily. It is also suitable for feed stores where shelled corn is sold. It is a two-hole power machine with a capacity of 600 to 700 bushels per day. It can be driven with a 2 H. P. engine.

The Keynote sheller is regularly equipped with self-feeder, cob stacker and wagon box elevator. It cannot be mounted on trucks, but is regularly supplied in stationary form.

### Adjustable Cob Stackers

The cob stacker regularly furnished with the Keynote sheller is 8 ft. 2 in. long and can be adjusted up and down but does not swing from side to side.



*Illust. 4 — McCormick-Deering Keynote Two-hole Sheller.*

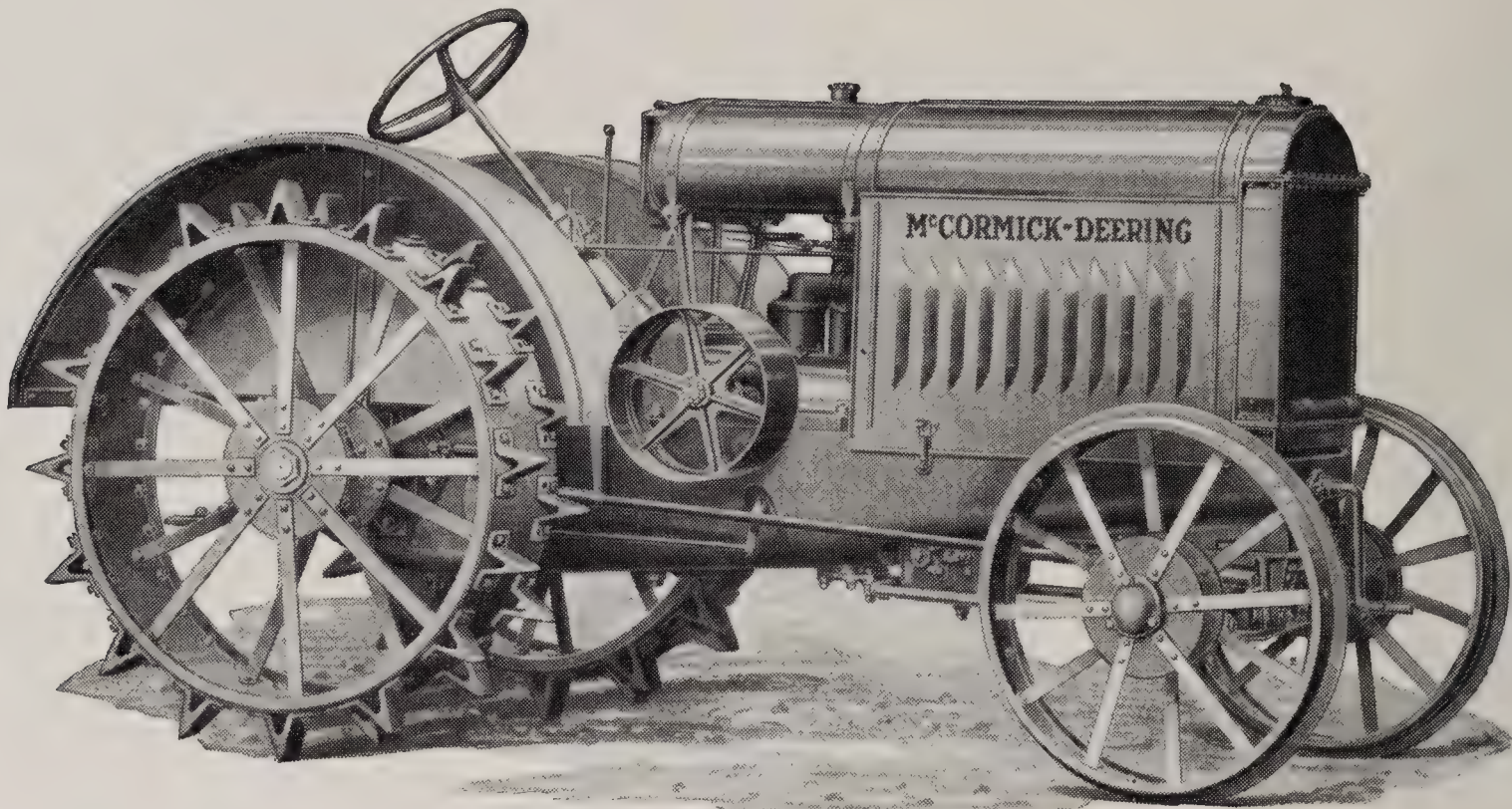
### Specifications—McCormick-Deering Corn Shellers

Size	Description	Approximate Weight
2-hole	XL Hand or Power Sheller	290 lbs.
2-hole	Keynote Power Sheller	750 lbs.





## McCormick-Deering Tractors



*Illust. 1—McCormick-Deering 10-20 H.P. Tractor pulls two plows under average soil conditions.*

### Backed By Experience

In designing and building the McCormick-Deering 10-20 and 15-30 the Harvester Company has endeavored to produce tractors which will give maximum service and economy in operation. Practical experience with tractors in the field under every possible condition for the past eighteen years has resulted in the present modern design which meets the maximum number of power requirements.

The practical design, ease of handling and convenience of operation, coupled with the increased speed, gives McCormick-Deering tractor owners an ideal two-plow or three-plow power. The McCormick-Deering 10-20 or 15-30 develops a surplus of power for doing the maximum number of belt jobs such as threshing, silo filling, husking and shredding, etc., and yet their design, flexibility of operation and speed make them leaders for drawbar work on the farm, road building and maintenance and hauling.

### Engine

McCormick-Deering tractors are equipped with vertical four-cylinder, valve-in-head engines. These engines operate economically and satisfactorily on kerosene (coal oil) and other low-priced fuels. They have long, close-fitting pistons and each piston has four compression rings. The engine crank-shaft has two heavy duty ball bearings.

### Cylinders

Each cylinder is cast separately and fitted into the engine block. These cylinders may be easily replaced in case they become scored or worn.

### Ignition

High tension magneto supplies current for the jump spark ignition. The magneto is equipped with impulse starter, and the engine starts and runs on the magneto. No batteries are needed.

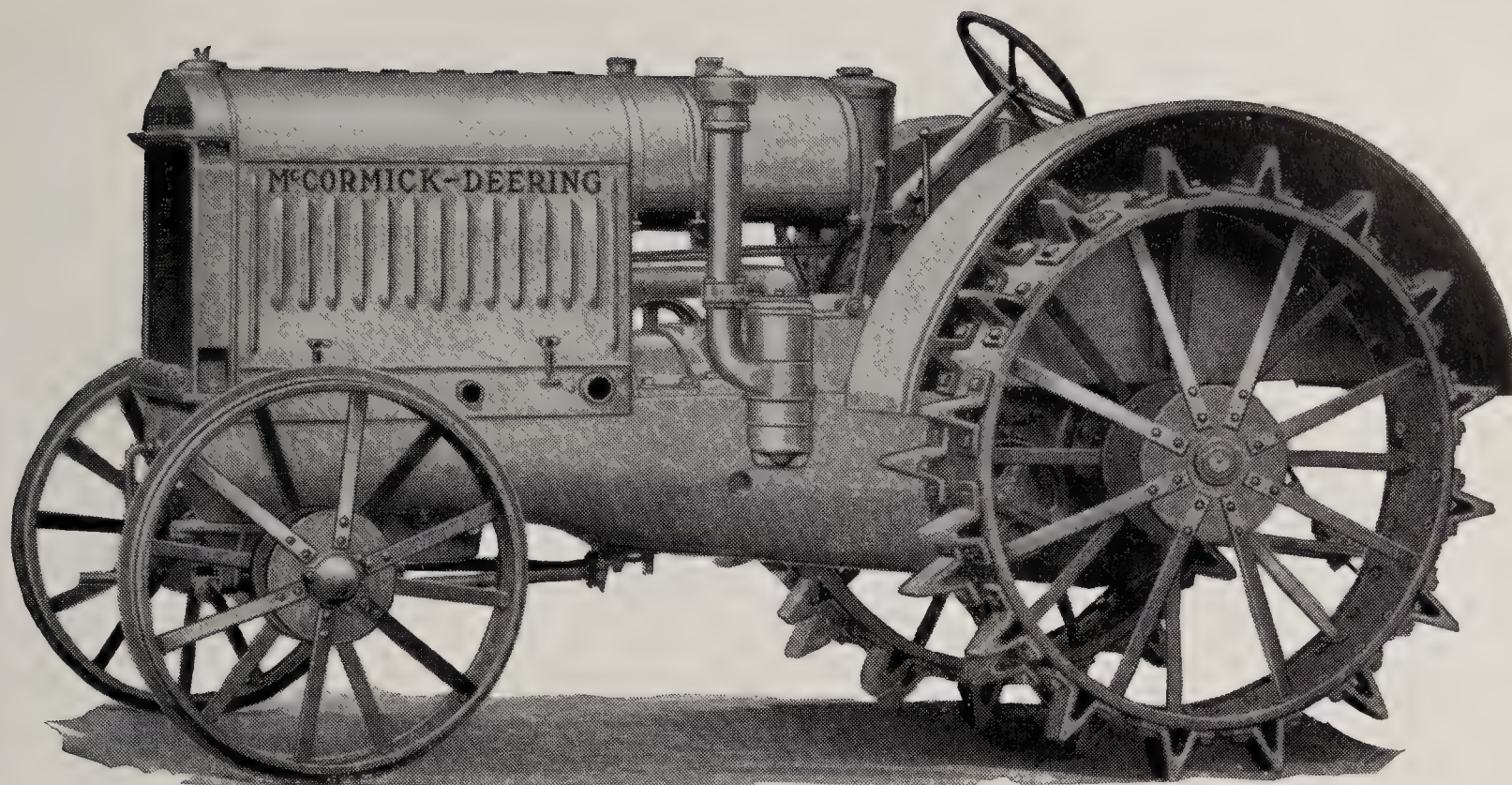
### Specifications— McCormick-Deering 10-20

Drawbar.....	10 H.P.
Belt.....	20 H.P.
Forward speeds.....	2—3—4 m.p.h.
Reverse speed.....	2 $\frac{3}{4}$ m.p.h.
Engine speed.....	1000 r.p.m.
Bore.....	4 $\frac{1}{4}$ in.
Stroke.....	5 in.
Pulley speed.....	645 r.p.m.
Belt speed.....	2575 ft. p.m.
Power take-off shaft speed.....	540 r.p.m.
Pulley diam.....	15 $\frac{1}{4}$ in.
Pulley face.....	7 in.
Front wheel diam.....	30 in.
Front wheel face.....	4 $\frac{1}{2}$ in.
Tread, front.....	45 $\frac{1}{2}$ in.
Drive wheel, diam.....	42 in.
Drive wheel, face.....	12 in.
Tread, rear.....	48 in.
Wheelbase.....	78 in.
Length (over all).....	123 in.
Width (over all).....	60 in.
Total height—steering wheel.....	62 in.
Total height—radiator.....	57 in.
Turning radius.....	15 ft.
Kerosene tank.....	14 $\frac{1}{2}$ gals.
Gas tank.....	$\frac{3}{4}$ gal.
Gear ratio (high).....	29 $\frac{1}{4}$ to 1
Drawbar adj.....	vert., 11 to 18 in. hor., 14 in.
Platform.....	30x44 $\frac{3}{4}$ in.
Approx. shipping wt.....	3900 lbs.





## McCormick-Deering Tractors



*Illust. 2—McCormick-Deering 15-30 H.P. Tractor pulls three plows under average soil conditions. Canada's most popular tractor.*

### Governor

Fly-ball throttle governor keeps the speed of the engine practically uniform by regulating the fuel to the load.

### Transmission

Selective type of transmission is used and all gears run in an oil bath. The transmission may be removed as a unit.

### Final Drive

The power is transmitted to the drive wheels through large steel spur gears which run in an oil bath and are carefully protected from dust and dirt.

### Ball and Roller Bearings

A large number of ball and roller bearings are used in McCormick-Deering tractors. These bearings reduce friction, are easily lubricated, and are durable.

### Forward Speeds

Three forward speeds are provided—two, three and four miles an hour. The two-mile speed for heavy pulling, three-mile for plowing, and four-mile for hauling. A reverse speed is provided.

### Regular Equipment for McCormick-Deering 10-20 and 15-30

Throttle governor. Fenders over rear wheels. Comfortable platform. Belt pulley. Adjustable drawbar. Removable spade lugs. High tension magneto. Handy brake. Radiator curtain.

### Extra Equipment for McCormick-Deering 10-20 and 15-30

Power take-off attachment. High skid rings, for front wheels. Angle lugs. Extension tires for rear

wheels. Extension tires for front wheels. Over-tire for regular rear wheels. Belt pulleys. Road wheels. Malleable road lugs.

### Specifications— McCormick-Deering 15-30

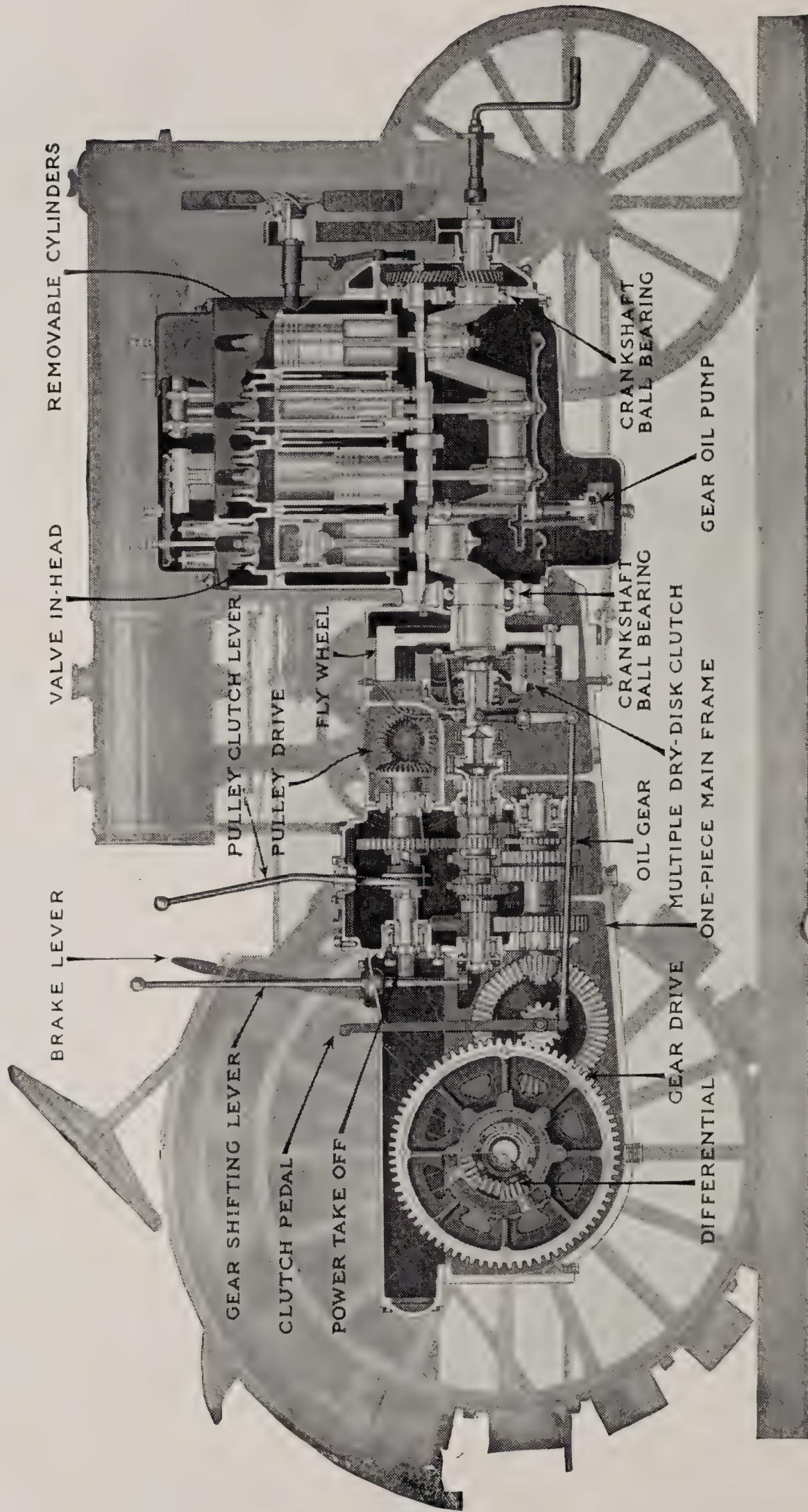
Drawbar.....	15 H.P.
Belt.....	30 H.P.
Forward speeds.....	2—3—4 m.p.h.
Reverse speed.....	2 $\frac{3}{4}$ m.p.h.
Engine speed.....	1000 r.p.m.
Bore.....	4 $\frac{1}{2}$ in.
Stroke.....	6 in.
Pulley speed.....	595 r.p.m.
Belt speed.....	2600 ft. p.m.
Power take-off shaft speed.....	510 r.p.m.
Pulley diam. (regular).....	16 $\frac{3}{4}$ in.
Pulley face.....	9 in.
Front wheels diam.....	34 in.
Front wheels face.....	6 in.
Tread, front.....	52 in.
Drive wheel, diam.....	50 in.
Drive wheel, face.....	12 in.
Tread, rear.....	53 in.
Wheel base.....	85 in.
Length over all.....	133 in.
Width over all.....	65 in.
Total height—steering wheel.....	70 in.
Total height—radiator.....	64 in.
Turning radius.....	15 ft.
Kerosene tank.....	17 gals.
Gas tank.....	1 gal.
Water tank for fuel mixture.....	9 gals.
Gear ratio (high).....	33 $\frac{1}{3}$ to 1
Drawbar adj.....	vert., 11 to 21 in., hor., 16 in.
Platform.....	35x52 in.
Approx. shipping weight.....	5750 lbs.





## McCormick-Deering Tractors

Sectional View of McCormick-Deering Tractor



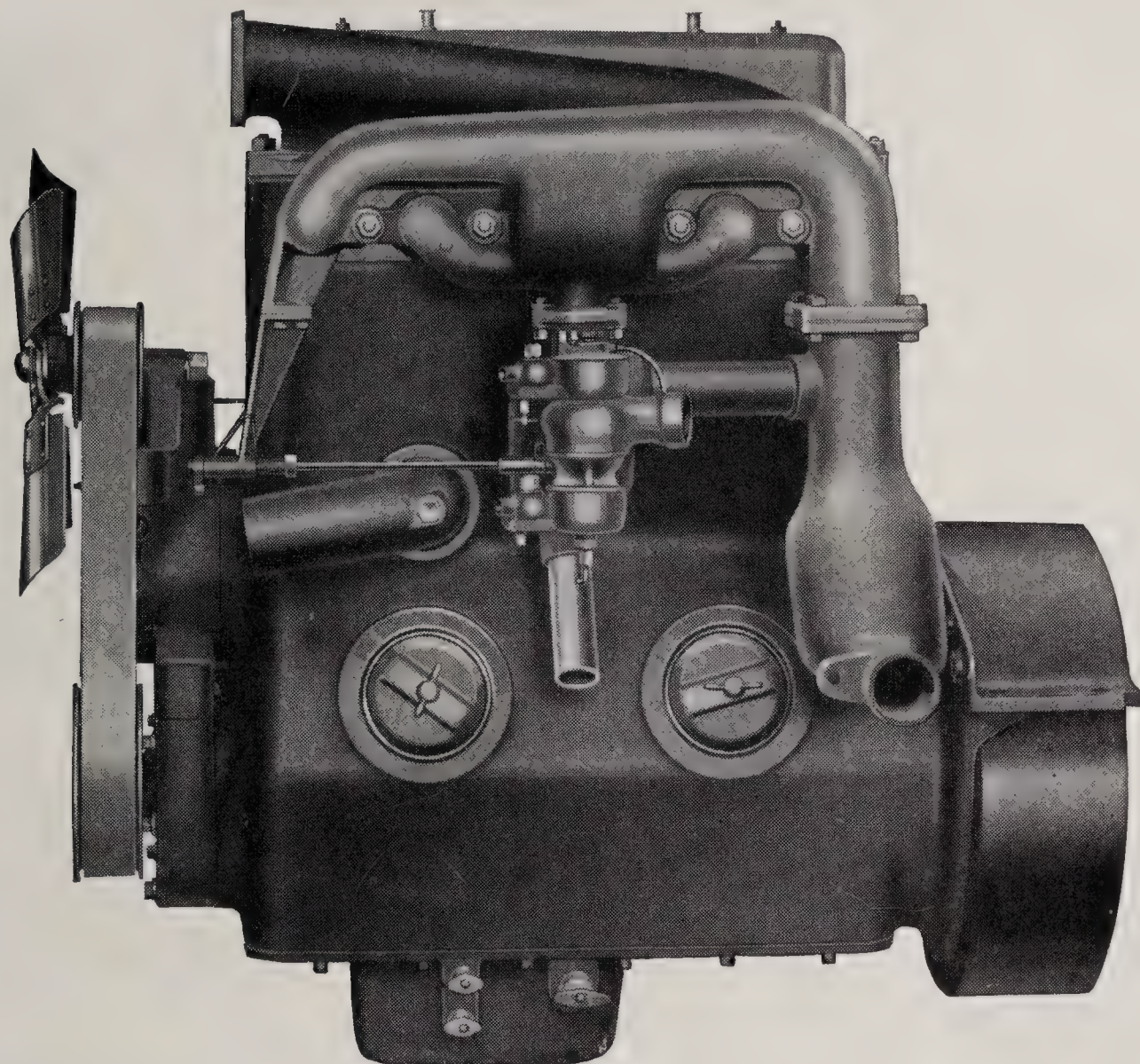
*Illust. 3—One-piece main frame forms dust-proof and oil-tight housing for the working parts. The two-bearing crankshaft runs in high-grade, heavy-duty ball bearings that are easily lubricated, durable, light running, and*

*require no adjustments. Combination force circulation and splash system of lubrication. The forward speeds are 2, 3 and 4 miles per hour. Twenty-eight ball and roller bearings reduce friction and save power for profitable work.*





## McCormick-Deering Tractors



*Illust. 4—Engine showing carburetor and large hand holes through which adjustments may be made.*

### Lubrication

A combination force-feed and splash system of lubrication is used. The oil is kept in circulation by a gear-driven rotary pump which delivers it to troughs underneath the connecting rods. This construction insures complete and proper lubrication whether the tractor is working on grades, side hills, or on the level. The front wheels, fan, and other parts are lubricated by the Alemite pressure system.

### Cooling System

The thermo-siphon system of cooling used insures uniform cylinder temperature. A heavy duty radiator is provided and air circulation through the radiator is caused by the belt-driven fan.

### Oil Air Cleaner

The air which reaches the engine passes through an oil air cleaner which removes dust and dirt and thus cuts down the wear on the engine parts. The filter is composed of fine drawn annealed wire crimped and matted in place. There is over a mile of wire in this cleaner, which, being covered with a film of oil, provides a very large surface for intercepting dust particles. The action of the air as it enters the cleaner carries the oil up into the filter. The cup at the bottom holds the oil. The dust which is caught settles to the bottom. Waste oil from the engine crankcase is satisfactory for use in this cleaner.

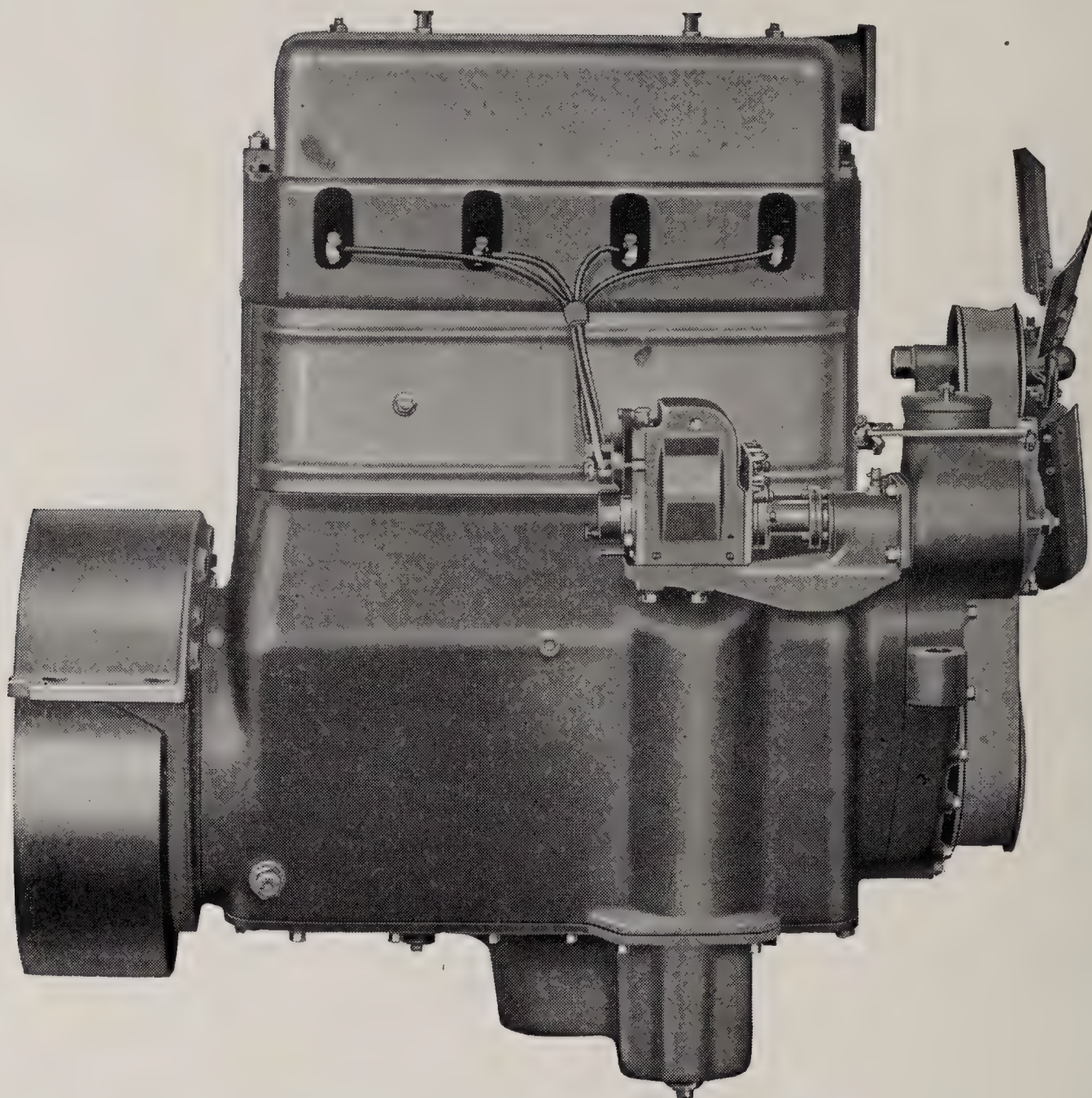


*Illust. 5—Most efficient air cleaner made.*

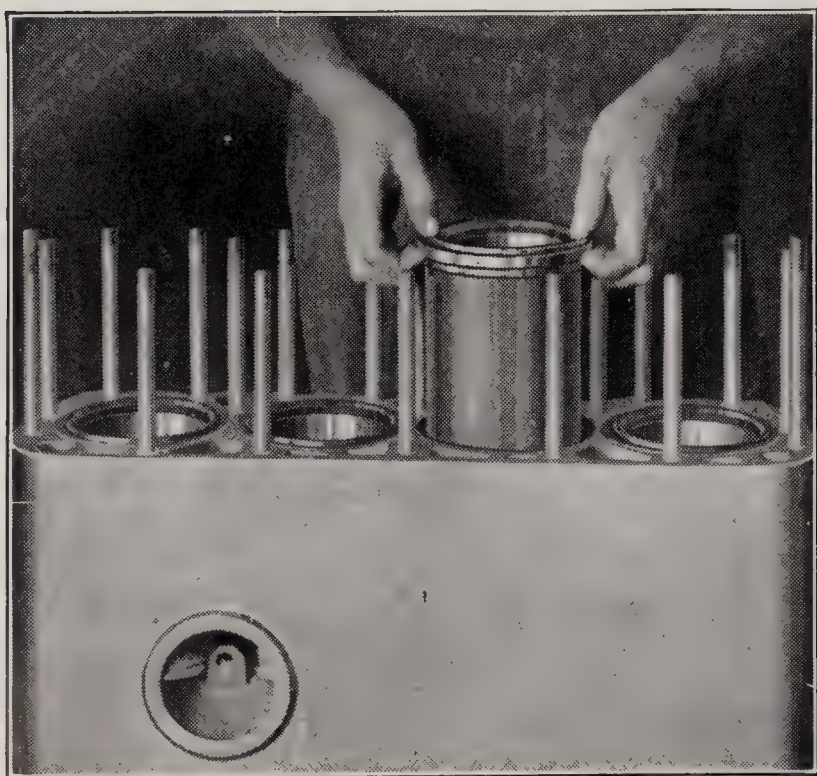




## McCormick-Deering Tractors



*Illust. 6—Engine showing high tension magneto and spark plug connections.*



*Illust. 7—It is a simple, quick and inexpensive job to remove and replace a worn cylinder sleeve in a McCormick-Deering Tractor Engine.*

### Valve-in-Head Engine

McCormick-Deering tractors are equipped with 4-cylinder vertical valve-in-head engines. They operate economically on kerosene (coal oil), gasoline, etc. Each of the pistons has four piston rings.

### Removable Cylinders

Each cylinder is cast separately and fitted into the engine block. This feature makes it possible to quickly and easily replace a scored or worn cylinder without removing the engine from the frame. Removable cylinders have walls of uniform thickness which aids cooling and assists in proper lubrication. The removable cylinders are made of close grained special analysis iron which is hard and wear resisting.

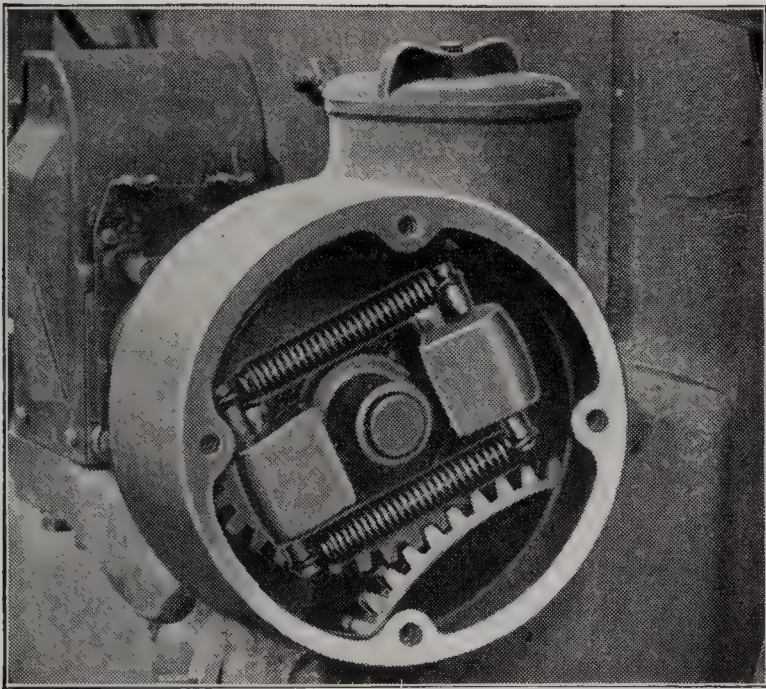
### Kerosene Carburetor

A patented kerosene carburetor is used on McCormick-Deering tractors. These carburetors are so designed and built as to get the maximum amount of power out of low-grade fuels. There are no delicate adjustments to be made and almost anyone can operate McCormick-Deering tractors with ease.

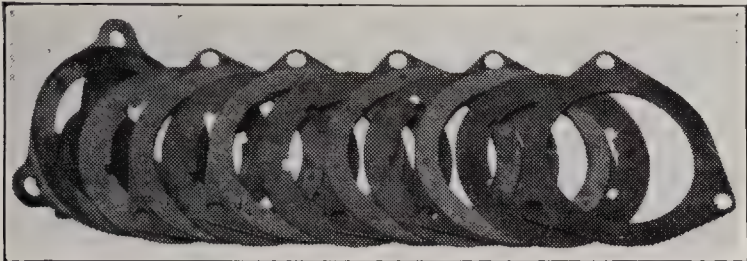




## McCormick-Deering Tractors



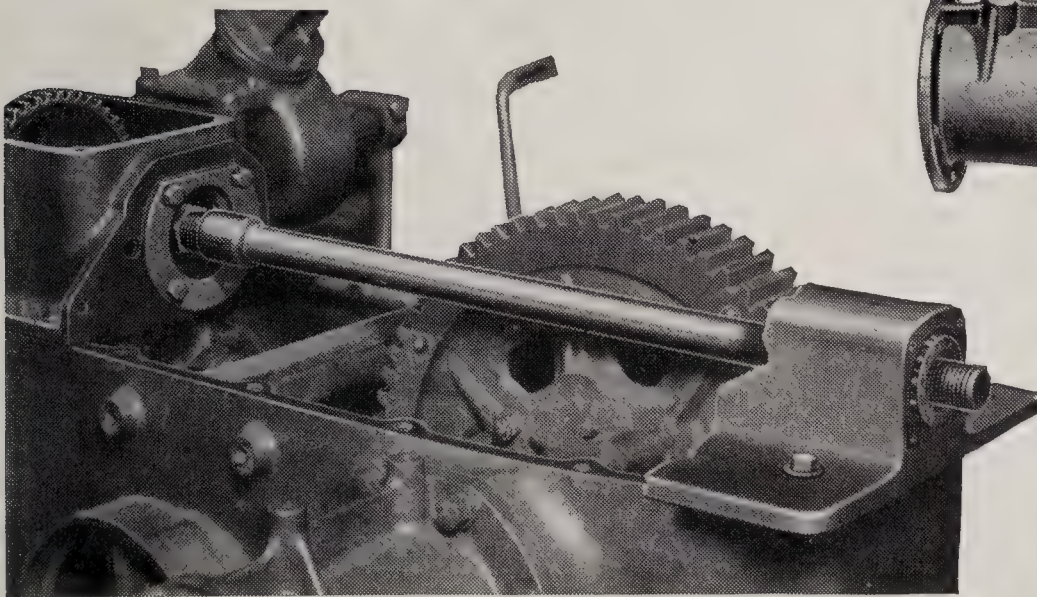
*Illust. 8—Efficient throttle governor.*



*Illust. 9—Multiple dry disk clutch.*

### Power Take-off

Power take-off is attached directly to the transmission and is thrown in and out of gear by the lever that controls the belt pulley. It is driven by the main clutch and runs at the same speed regardless of the forward speed of the tractor. It can be operated when the tractor is in first or second gear and does not operate in high gear or in reverse. It can be operated when the tractor is standing still, which is an advantage in case the driven machine becomes choked or clogged.



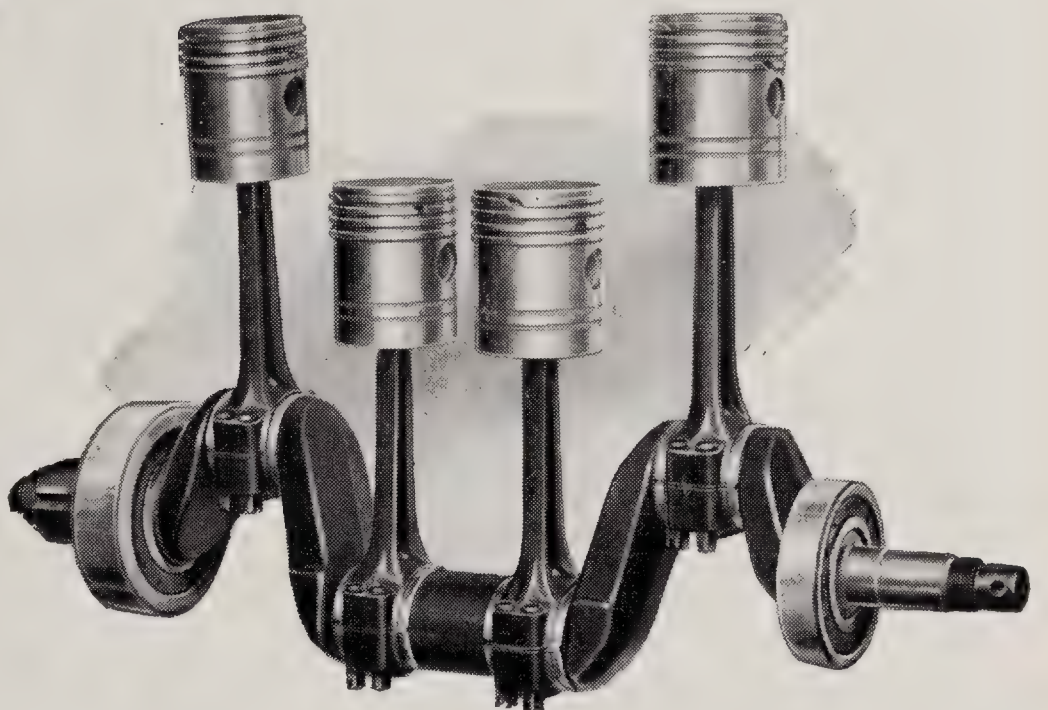
*Illust. 11—Power take-off has more uses than can be enumerated here. It is supplied on special order at additional cost. It pays for itself many times over on the average farm.*

### Throttle Governor

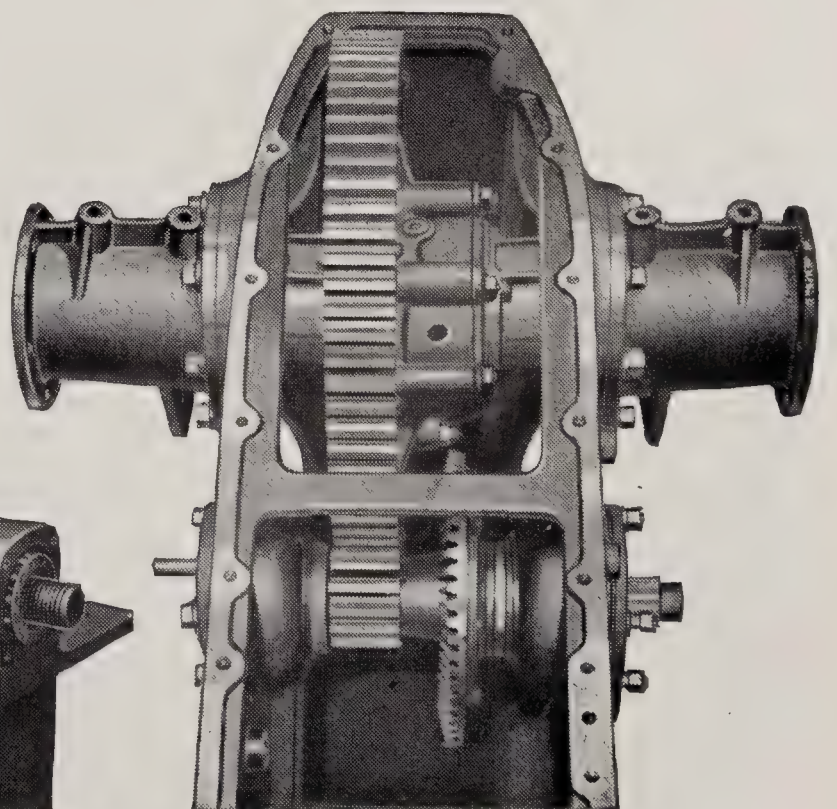
The flyball throttle governor keeps the speed of the engine practically uniform, regardless of the load. It regulates the fuel to the load, and maintains the proper speed without attention from the operator. It saves one man's time when doing belt work and relieves the operator of constantly manipulating the throttle on drawbar work.

### Multiple Disk Clutch

The multiple dry disk clutch has large friction surfaces, ample to transmit several times as much power as will ever be required of them. There are ten friction surfaces—1,450 square inches of clutch surface in all, which insures full power.



*Illust. 10—Each piston is provided with four compression rings and two oil grooves.*

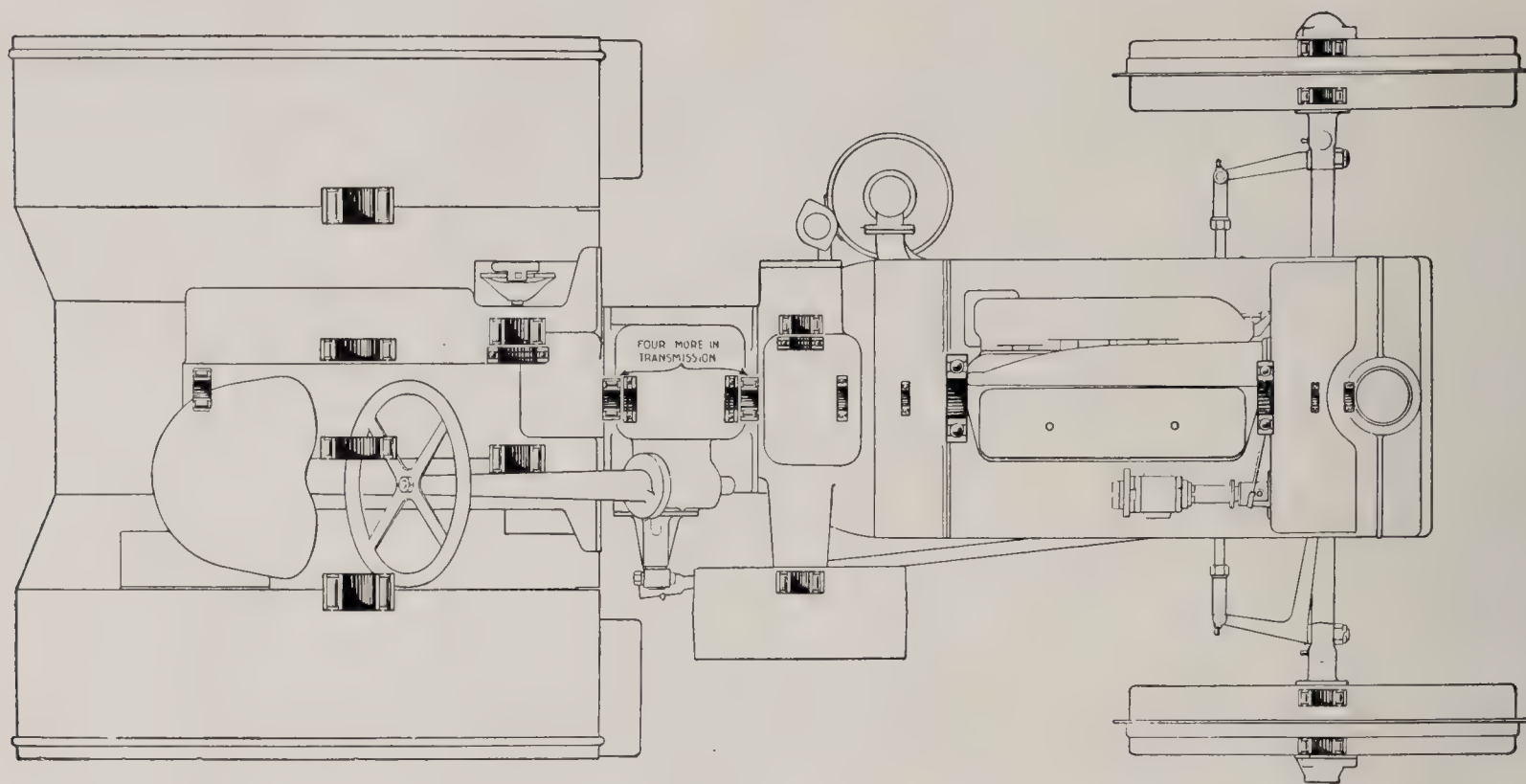


*Illust. 12—Spur gear final drive transmits power to the drive wheels through large spur gears which run in a bath of oil and are thoroughly protected from dirt.*





## McCormick-Deering Tractors



*Illust. 13—Showing the location of ball and roller bearings which contribute to long life and light draft of these tractors.*

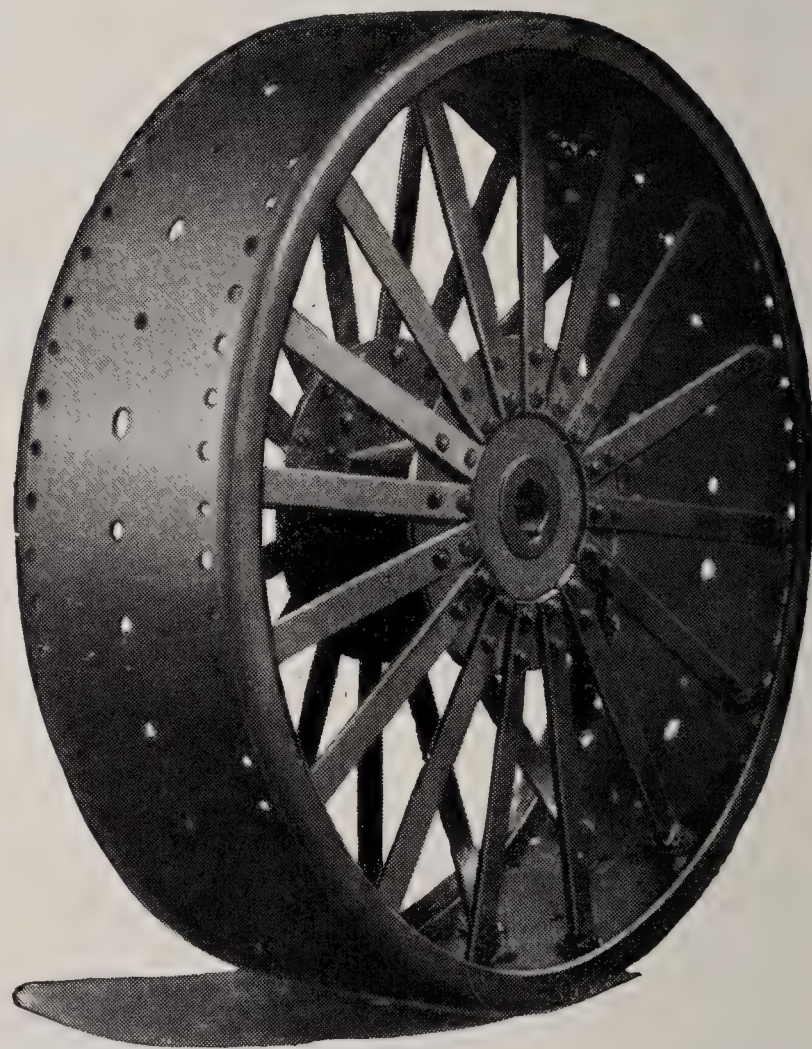
### Bearings

McCormick-Deering tractors are equipped with a large number of ball and roller bearings. These types of bearings have been used at all points where experience shows that they give the best of service. Ball and roller bearings reduce friction and wear and add to the life and service of the tractor. They are easily lubricated and durable.

Bronze-backed, babbitt-lined bearings are used in the connecting rods. The cam shafts, steering knuckles, rocker arms and piston pin bearings or bushings are of phosphor bronze. They are all replaceable.



*Illust. 14—A large number of important bearings are lubricated by the Alemite pressure system which insures thorough oiling.*



*Illust. 15—Special wheels with twice as many spokes can be supplied at extra cost for use in brush breaking or in extra heavy work where the strain on wheels and axle is great.*

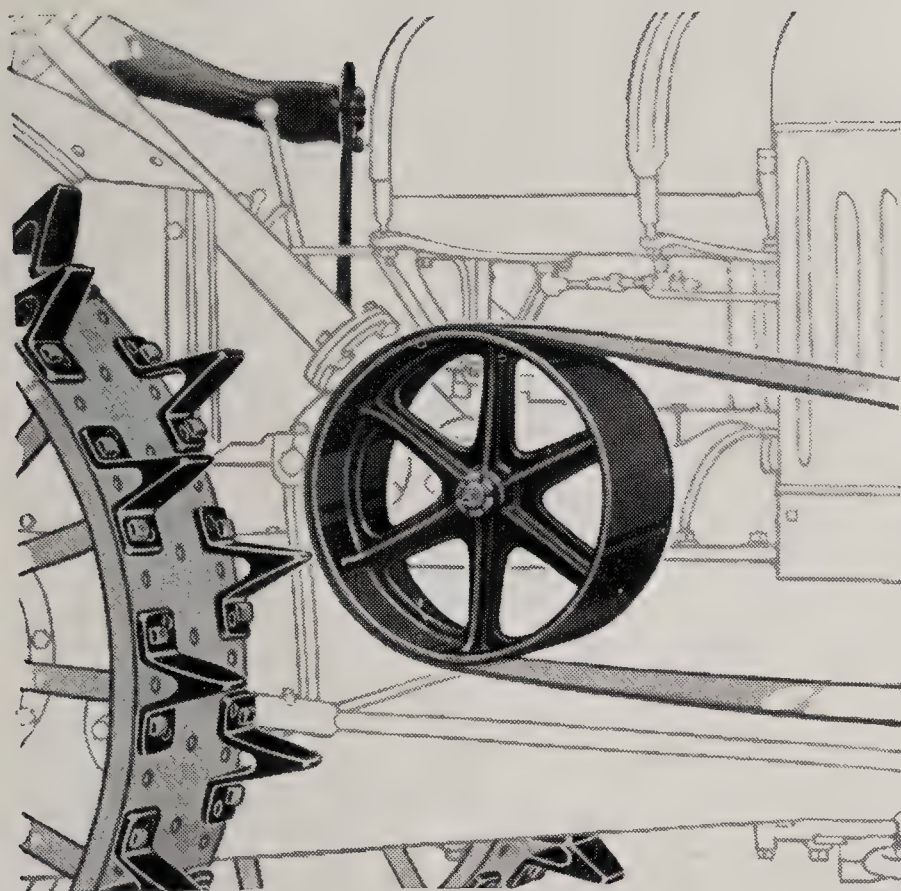
### Road Wheels

While road wheels are designed primarily for use on city streets and paved roads, where lugs are not permitted, there are certain classes of rough field work such as brush breaking where extra strength is needed. These wheels are twice as heavy and strong as the regular wheel and take the same lug equipment.





## McCormick-Deering Tractors



*Illust. 16—Handy brake, large belt pulley, and removable lugs, essential features which add to the practical value of the tractor.*

### Adjustable Drawbar

The drawbars have a wide range of adjustment. An adjustable drawbar is a very essential part of a practical farm tractor. This feature enables McCormick-Deering tractor owners to hitch to various farm machines quickly and easily. The drawbar can be raised or lowered by a turnbuckle. The horizontal adjustment is also very important because it permits the tractor to be properly hitched to plows, disk harrows, binders, etc. The drawbar has a wide range of horizontal and vertical adjustments.

### Comfort of Operator

Every possible feature of convenience for the comfort of the operator is found on McCormick-Deering tractors. The position of the seat places the operator high above the dust zone, making it possible for him to see ahead and watch all operations to the best advantage. The wide fenders protect the operator and the tractor from dust and dirt.

### Three Forward Speeds

McCormick-Deering tractors have three forward speeds—two, three, and four miles an hour; the two miles for heavy work, three miles for plowing speed, and four miles for hauling and light work. A reverse speed is provided.

### Belt Pulley

The belt pulleys on McCormick-Deering tractors are large and have wide faces. This construction

prevents unnecessary belt slippage and waste of power. The pulley is located on the right-hand side of the tractor, and high enough from the ground so that the belt does not strike the front axle. It is driven by the tractor clutch and controlled by a separate lever. It is not operated when doing drawbar work.

### Handy Brake

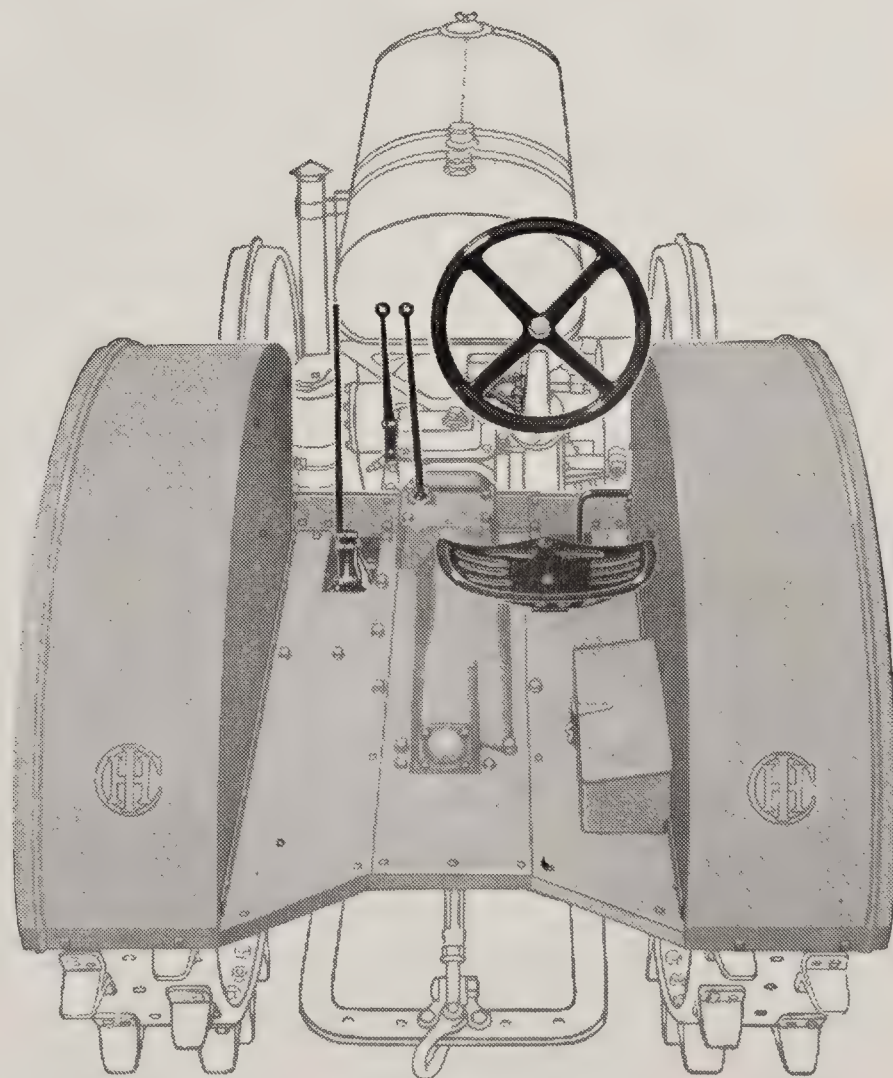
All McCormick-Deering tractors are provided with a brake. The brake lever is easily reached from the tractor seat. The brake operates on the countershaft and is very effective. This is a very essential feature in doing both drawbar and belt work.

### High-Tension Magneto

McCormick-Deering tractors are equipped with high-tension magnetos. They are located where readily accessible and are constructed water-and-dust proof. Impulse starters are provided. The engine starts and runs on the magneto. No batteries are required.

### Steel Platform

Large comfortable steel platforms are provided. They give the operator more freedom and provide a carrying space. They are a safety feature.

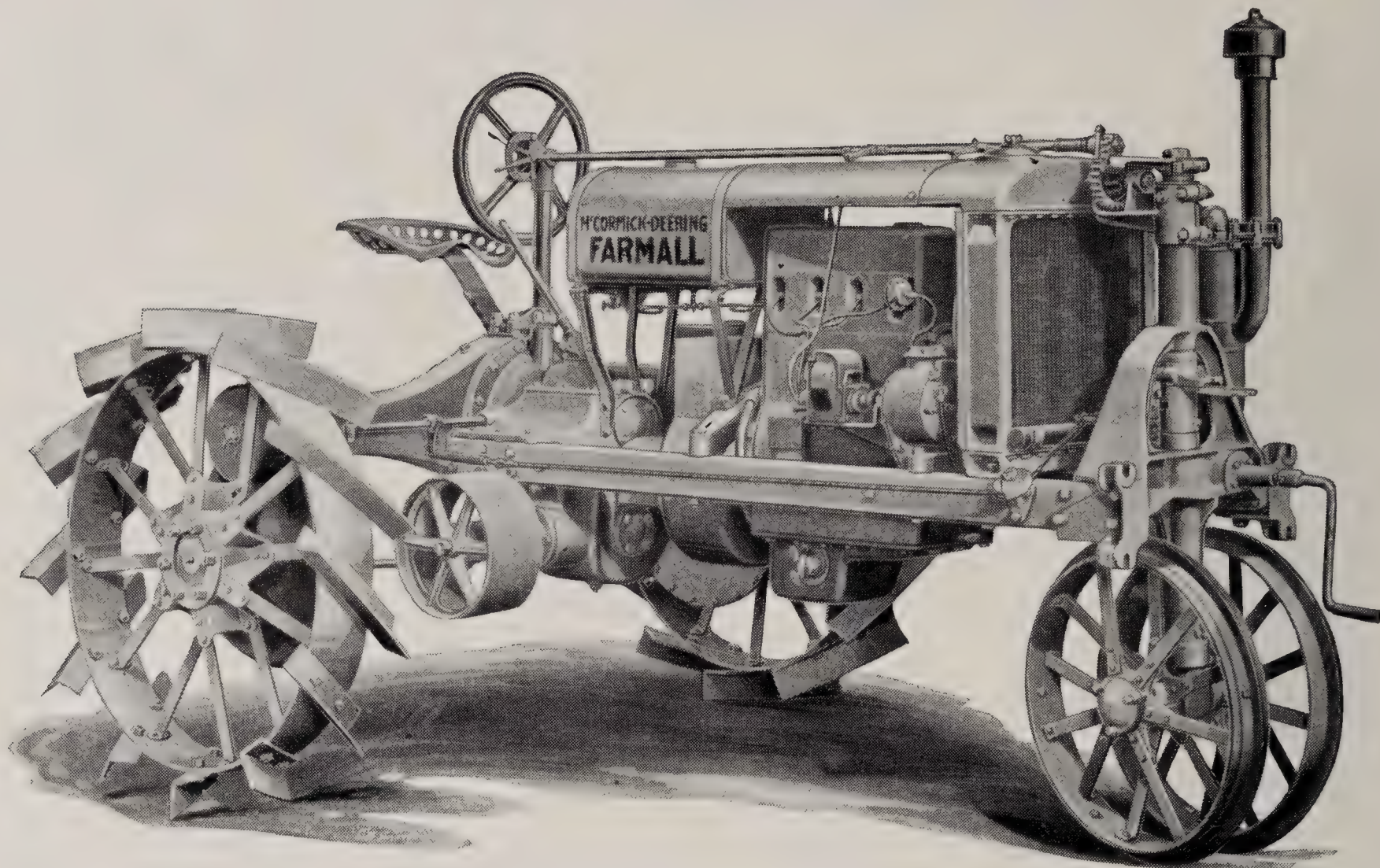


*Illust. 17—Comfortable platform and protective fenders—features which should be on every farm tractor.*





## McCormick-Deering Farmall Tractor



*Illust. 1—McCormick-Deering Farmall Tractor for all farm work.*

### Powerful Engine

The engine is of the standard four-cylinder, valve-in-head type, and operates on kerosene economically. The two-bearing crankshaft runs in high-grade ball bearings.

The speed of the engine is kept practically uniform by the throttle governor which regulates the fuel on the load.

### Latest Features

A combination of force-feed and splash system of lubrication is used.

The transmission has three forward speeds and one reverse. The transmission gears are enclosed in a dust-proof housing and run in an oil bath.

An effective brake is provided and is operated by a hand lever which is within easy reach of the operator.

### Regular Equipment

Belt pulley, adjustable drawbar, removable lugs, throttle governor, brake, power take-off, Pomona oil air cleaner.

### Extra Equipment

Cultivator attachment (see Illust. 5), mower attachment (see Illust. 4), 2-row middle breaker attachment, Farmall hitches, angle lugs, rear wheel shield used when cultivating.

### Specifications

Belt Horse Power, suitable for 20-inch threshers fully equipped or average size ensilage cutters.

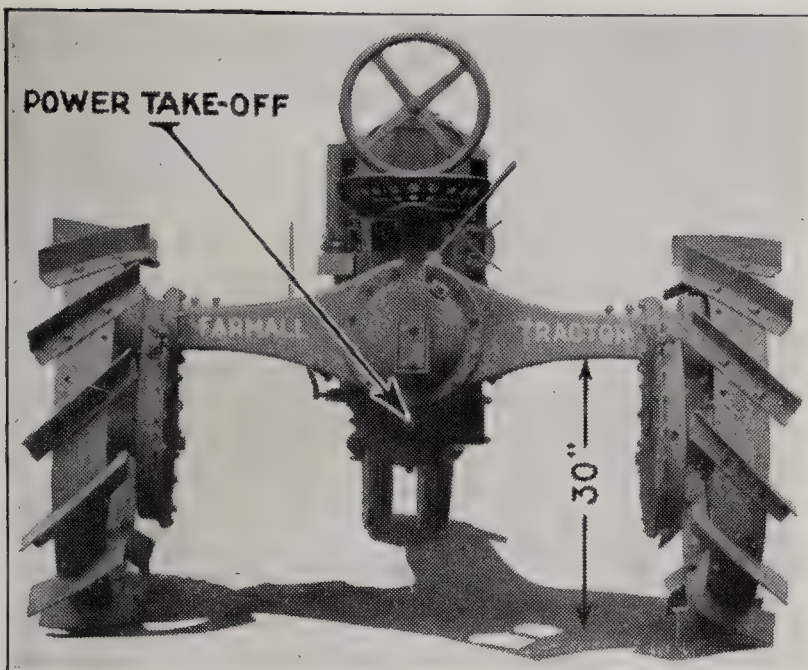
Drawbar Horse Power, pulls two 14-inch bottoms in average soil conditions.

Forward Speed, miles per hour.....	2, 3 and 4
Reverse Speed, miles per hour.....	2½
Speed of Engine, rev. per min.....	1200
Bore of Cylinders.....	3¾ inches
Stroke of Pistons.....	5 "
Belt Pulley, regular—diameter.....	14 "
Belt Pulley—face.....	6½ "
Pulley Speed, rev. per min.....	693
Belt Speed, feet per min.....	2540
Power Take-off Shaft, rev. per min.....	536
Front Wheels, diameter.....	25 inches
Front Wheels—face.....	4 "
Tread, front wheels.....	10 "
Drive Wheels, diameter.....	42 "
Drive Wheels, face, 6-inch Lugs.....	12 "
Tread, drive wheels.....	74 "
Wheel Base.....	85 "
Total Length.....	123 "
Total Width.....	86 "
Height, top steering wheel.....	67 "
Height, top radiator.....	58 "
Turning Radius.....	7½ feet
Capacity, kerosene tank.....gal.	13
Capacity, gasoline tank.....gal.	7½
Drawbar, vertical adjustment.....	6½ in.
Drawbar, horizontal adjustment.....	43 "
Shipping Weight, approximately.....	3350 lbs.





## McCormick-Deering Farmall Tractor



*Illust. 2—Thirty inches clearance under the rear axle permits cultivation of corn until it is well advanced.*

### Easy Steering

The steering mechanism enables short turns to be made quickly and with ease. In making short turns an automatic brake holds the inside wheel. The drawbar has a wide range of both vertical and horizontal adjustments.

### High-Tension Magneto

The high-tension magneto insures proper ignition at all times. It is waterproof and dust-tight yet is readily accessible. It is equipped with an impulse starter which makes starting easy. No batteries, coils or switches are needed.

### Removable Cylinders

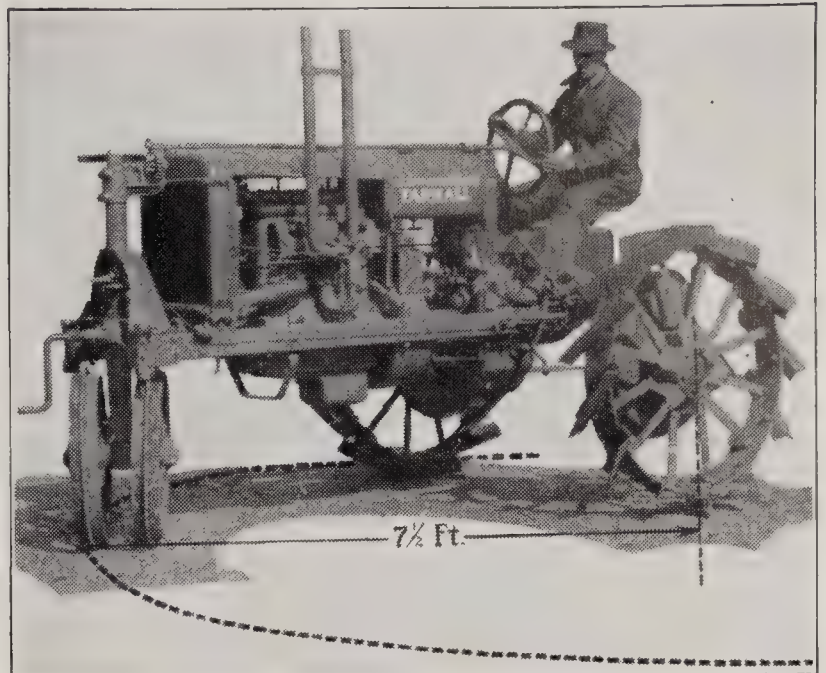
The cylinders are cast separately of close-grained iron and are fitted into the cylinder block similarly to the regular tractor. Should a cylinder become scored or worn, a new one can be easily put in place. New cylinders make practically a new engine.

### Drive Wheels

The drive wheels are of special design which makes them self-cleaning. This reduces slippage to a minimum and the wheels and lugs are so designed that the Farmall can travel on hard as well as soft ground. This design and light weight avoids packing the ground in cultivating, disking, drilling, etc.



*Illust. 4—Special mower attachment which can be supplied for use with the Farmall Tractor.*



*Illust. 3—Farmall Tractor turns in a sixteen-foot circle, using one rear wheel as a stationary pivot.*

### Belt Pulley

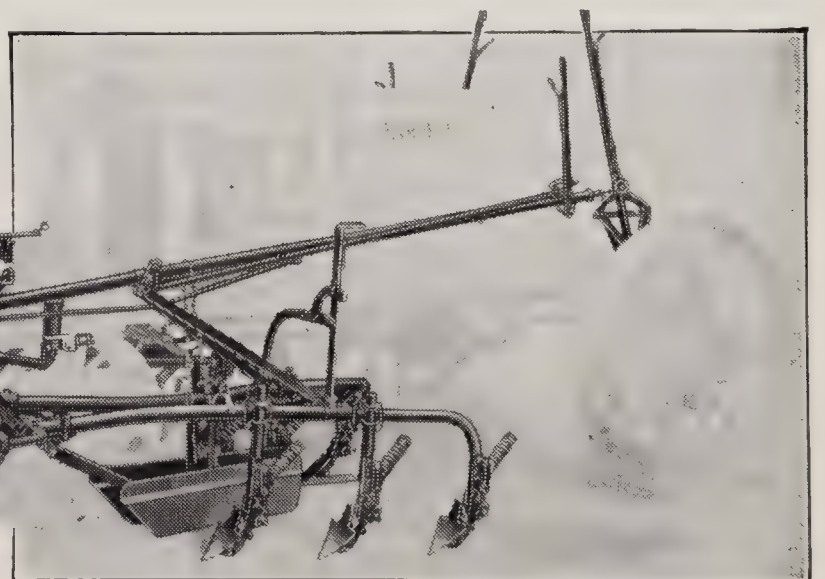
The belt is properly located on the right-hand side of the tractor, which makes it easy to line up the Farmall for belt work. It is high enough so that the belt does not strike the ground and there is no interference by the front wheels or axle.

### Power Take-off

The transmission is designed so that power can be transmitted from the engine directly to the driven machine by using a revolving shaft. Power take-off is controlled by the engine clutch and will run when the tractor is standing still. It runs at all speeds.

### Air Cleaner Prolongs Life

All of the air that is used by the engine must pass through the oil air cleaner which removes the dust and dirt. This helps to prolong the life of the tractor. The filter is composed of fine annealed wire matted into place. There is over a mile of wire in this cleaner. As the wire is covered with oil it collects the dust and dirt from the air which passes through it. Oil drained from the engine crankcase may be used in the cleaner.

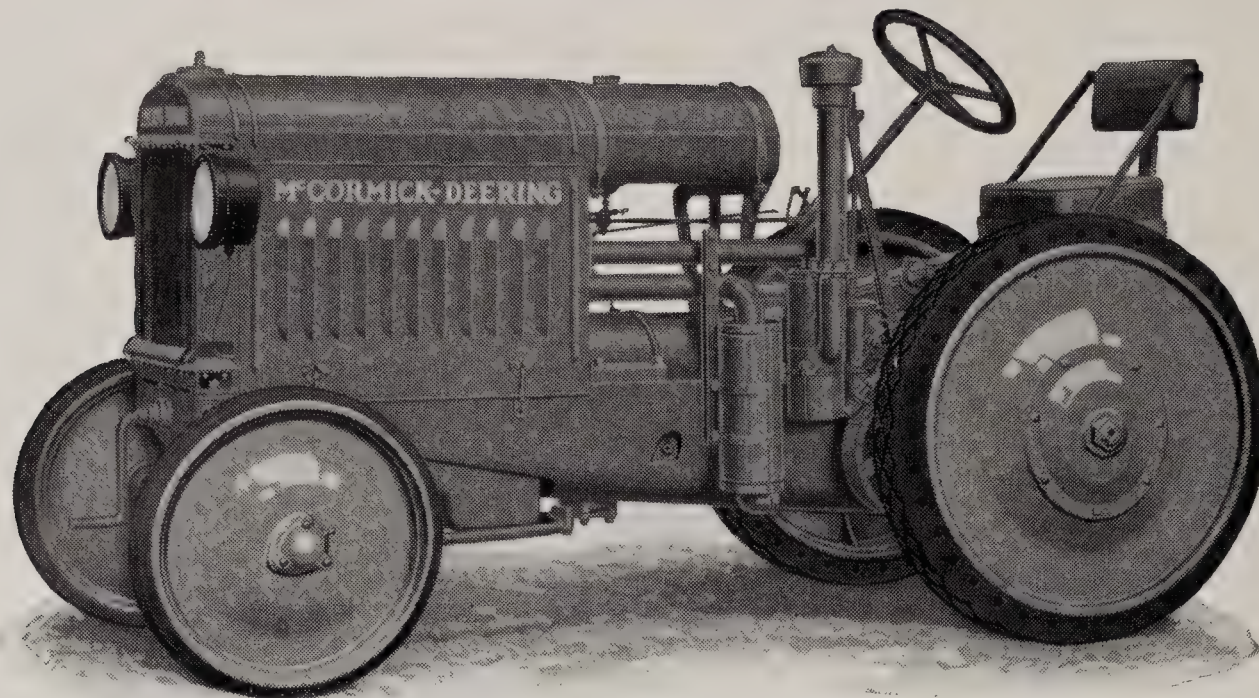


*Illust. 5—Special cultivating attachment can be supplied for the Farmall Tractor. It is pushed ahead of the tractor in plain view of the driver, who can do a clean job without damaging the corn.*





## McCormick-Deering Industrial Tractor



*Illust. 1—Plenty of Power for Industrial, Municipal or Commercial Service.*

The McCormick-Deering Industrial tractor delivers ample power for all kinds of industrial, commercial and municipal work. In road building and maintenance, in manufacturing plants, coal yards, lumber yards, stone quarries, sand pits, etc., where these tractors are in daily use, they are giving satisfactory service. The dispatch with which they enable the work to be done helps materially in increasing and speeding up production.

The McCormick-Deering Industrial tractor is similar in construction to the McCormick-Deering 10-20 with the exception that it is fitted with rubber-tired disk wheels, spring mounted in front, a spring seat, foot accelerator, internal expanding foot brakes, muffler, and equipped with transmission which gives it 2, 4 and 10 miles forward speeds.

The engine is of the valve-in-head, 4-cylinder, heavy-duty type. The working parts are thoroughly protected from dust and dirt, which makes this tractor well-adapted to all kinds of road construction and maintenance work. The main frame forms a rigid and substantial foundation for the engine and a dust and dirt-proof housing for the working parts.

The engine is built with the famous two-bearing crankshaft and heavy-duty crankshaft ball bearings. The cylinders are removable and if one should become worn it can be easily and quickly replaced on the job. The McCormick-Deering Industrial tractor can be equipped with belt pulley or power take-off. The power take-off attachment can be used for running such machines as concrete mixers, air compressors, etc.

### Specifications

*Horse power, belt.....	20
Forward speeds, miles per hour.....	2, 4 and 10
Reverse speed, miles per hour.....	3.8
Speed of engine, rev. per min.....	1000
Bore of cylinders.....	4 $\frac{1}{4}$ inches
Stroke of pistons.....	5 inches
*Pulley speed, rev. per min.....	645
*Belt speed, feet per min.....	2575
*Belt pulley, diameter.....	15 $\frac{1}{4}$ inches
*Belt pulley, face.....	7 inches
*Power take-off shaft, rev. per min.....	540
Front wheels, diameter.....	27 inches
Front wheels, face, plain hard rubber tires.....	3 $\frac{1}{2}$ inches
Tread, front wheels.....	45 $\frac{1}{2}$ inches
Drive wheels, diameter.....	40 inches
Drive wheels, face, non-skid.....	5 inches
Tread, drive wheels.....	47 inches
Wheelbase.....	78 inches
Total length.....	118 inches
Total width.....	59 inches
Height, steering wheel.....	61 inches
Height, radiator.....	56 inches
Turning radius.....	14 to 15 feet
Capacity, gasoline tank.....	14 $\frac{1}{2}$ gallons
Approximate shipping weight.....	4430 lbs.

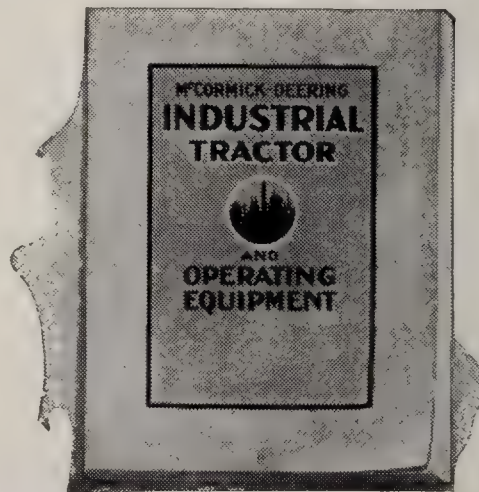
\*Belt Pulley and Power Take-off shaft furnished on special order at extra cost.

### Regular Equipment

Comfortable spring seat, two sets of brakes, high-tension magneto, throttle governor, muffler, oil air cleaner, drawbar, etc.

### Extra Equipment

Electric headlights, generator, battery, belt pulley attachment, power take-off attachment, extension rims with lugs, dual tires with 5-inch face mounted on disk wheels to be bolted to the regular wheels. Each dual-tire disk wheel weighs about 850 lbs. Pneumatic tires, sizes 26 x 4 non-skid for front wheels, 40 x 8 non-skid for rear.



*Illust. 2—This catalog contains information on all kinds of tractor equipment. Write for it.*



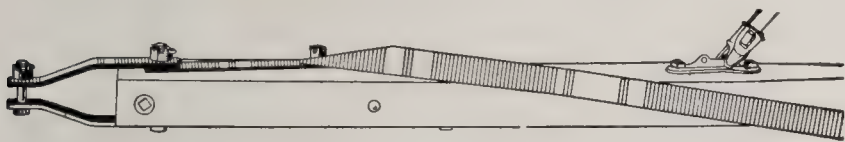


## Tractor Hitches

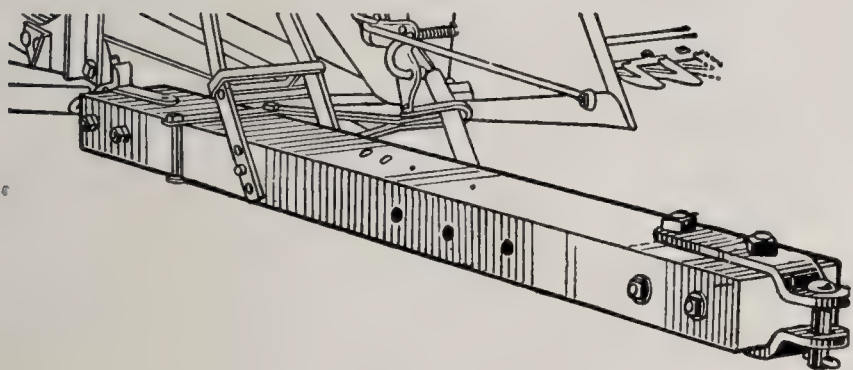
### List of Tractor Hitches

Deering stub tongue hitch, ZDA-104  
McCormick stub tongue hitch, Z-1367  
Deering stub tongue hitch for first binder of two, ZDA-103  
McCormick stub tongue hitch for first binder of two, Z-1353  
Deering steering tongue hitch, ZDA-101  
McCormick steering tongue hitch, ZA-1130  
One-man binder control tractor hitch, Deering ZDA-122; McCormick, ZA-1500  
Tractor hitches for combinations of binders  
Stub tongue tractor hitch for mowers, Z-1352  
Steering tongue tractor hitch for mowers, Z-1328  
Tractor hitch for grain drills  
Tractor hitch for push machines, Deering, ZDA-105; McCormick, Z-1295  
Tractor hitch for manure spreader  
Tractor hitch for disk harrows, No. J-9908  
Tractor hitch for corn binders, Deering, ZDA-127; McCormick, ZMA-4  
When ordering tractor hitches, be sure to give both the name and number of the hitch

### Tractor Hitch for One Grain Binder



*Illust. 1—ZDA-104 Deering Stub Tongue Tractor Hitch for one grain binder alone.*



*Illust. 2—Z-1367 McCormick Stub Tongue Tractor Hitch for one binder alone.*

### Tractor Hitch to Order for One Grain Binder

For use with not over 10-20 H. P. tractor.

#### For Deering Grain Binder

ZDA-104 Deering Stub Tongue Tractor Hitch (see Illust. 1) for one binder alone.  
Fits New Ideal or Ideal Deering binders.

#### For McCormick Grain Binder

Z-1367 McCormick Stub Tongue Tractor Hitch (see Illust. 2) for one binder alone.  
Fits Improved (flat frame) binder only—either right or left hand.

### Tractor Hitch for First Grain Binder of Two

When it is desired to hitch two binders behind a tractor, a tractor hitch for the first binder of two (see Illusts. 3 and 4) must be used on the first binder. The reason for this is the hitch parts furnished for pulling the binder with horses are designed with strength for pulling only one binder and also because some parts of the steering tongue hitch must be used on both front and rear binders. When a large tractor (over 10-20 H. P.) is used, a steering tongue tractor hitch is necessary on the first binder (see Illusts. 5 to 8) in order to permit it to cut a full swath.

### Tractor Hitch to Order for First Grain Binder of Two

(For use with not over 10-20 H. P. Tractor because it may not permit full width of cut when used with larger tractor.)

#### For Deering Grain Binder

ZDA-103 Deering Stub Tongue Tractor Hitch (see Illust. 3) for first binder of two.  
Fits New Ideal or Ideal Deering binders.

#### For McCormick Grain Binder

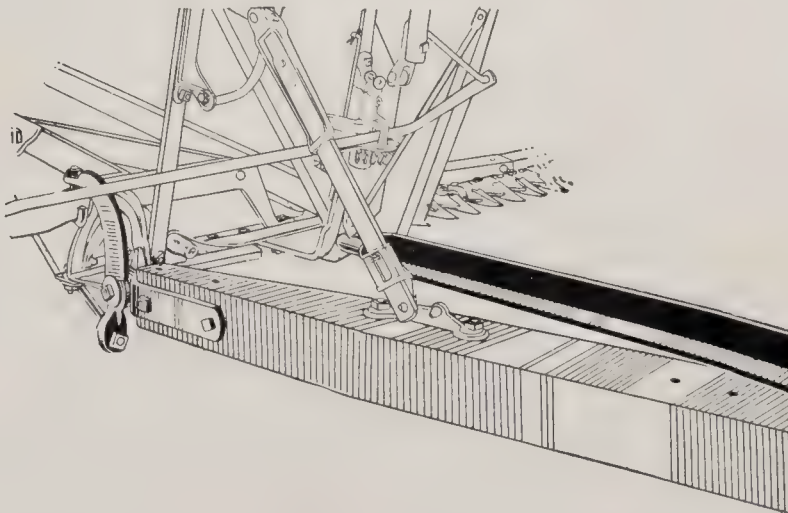
Z-1353 McCormick Stub Tongue Tractor Hitch (see Illust. 4) for first binder of two.  
Fits either right or left-hand binders of Improved (flat frame) type.

### Tractor Hitch for Second Grain Binder of Two

This hitch is known as the steering tongue tractor hitch (see Illusts. 5 to 8). When binders are pulled by a small tractor, this hitch is used in connection with a tractor hitch for the first grain binder of two.

For a large tractor a steering tongue tractor hitch must also be used on the first binder and one on each additional binder.

With the steering tongue tractor hitch the tongue can be swung in either direction as required. These hitches can be attached in the field without alterations or extra holes in the binder frames.

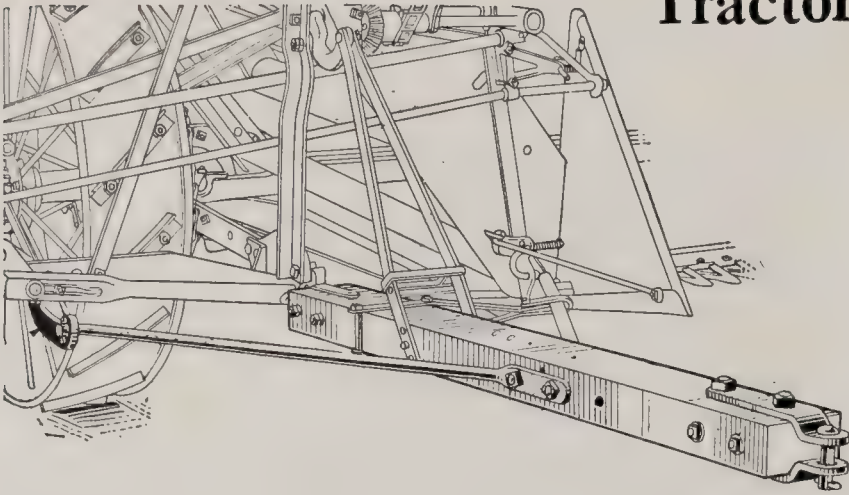


*Illust. 3—Front view of ZDA-103 Deering Stub Tongue Tractor Hitch for first binder of two.*

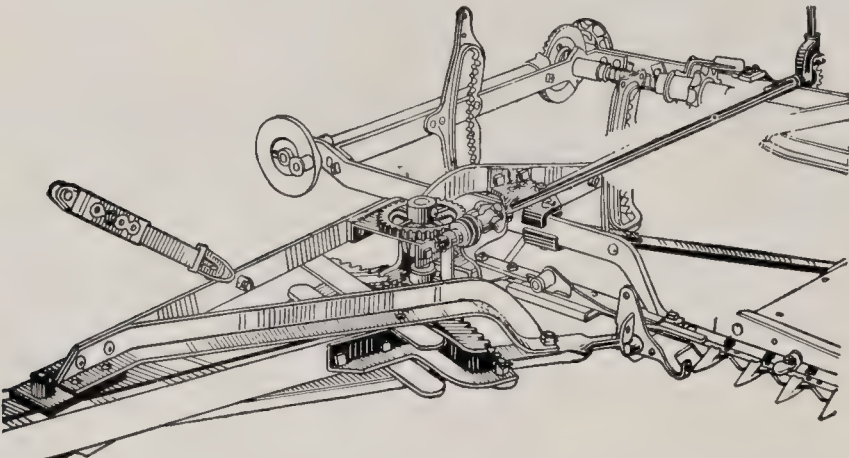




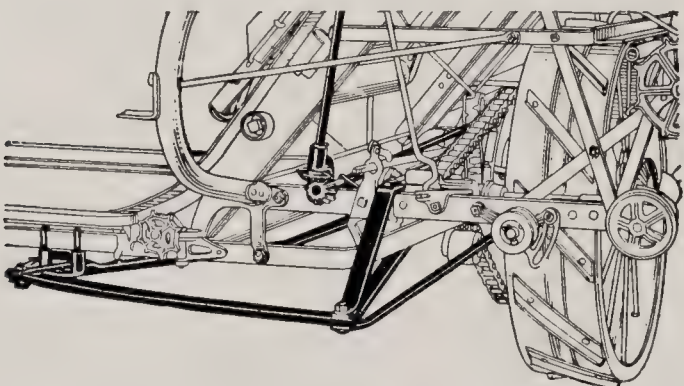
## Tractor Hitches



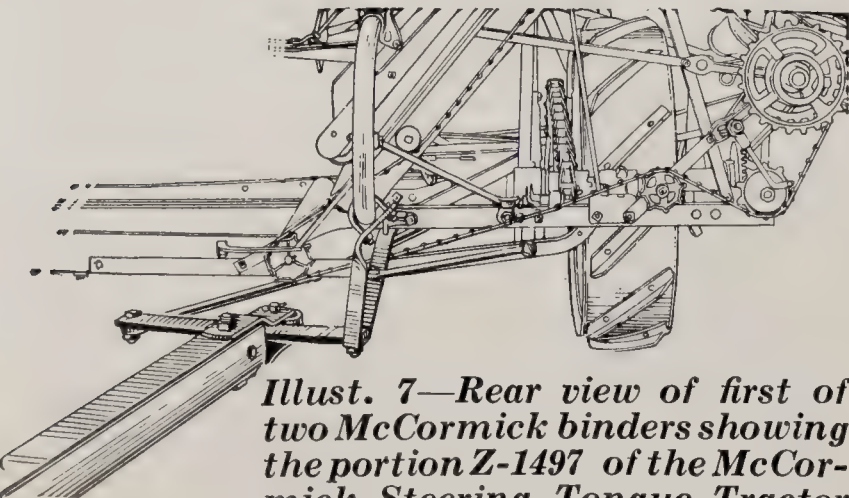
*Illust. 4—Front view of Z-1353 McCormick Stub Tongue Tractor Hitch for first binder of two.*



*Illust. 5—Front view of Deering Steering Tongue Tractor Hitch ZDA-101, used on the second grain binder of two.*



*Illust. 6—Rear view of the first of two Deering binders showing the portion of the Deering Steering Tongue Tractor Hitch, ZDA-101, which is placed on the rear of the first binder. The first binder must be drawn by a Deering Stub Tongue Tractor Hitch, ZDA-103 (Illust. 3) except when pulled by a tractor larger than 10-20 H. P.*



*Illust. 7—Rear view of first of two McCormick binders showing the portion Z-1497 of the McCormick Steering Tongue Tractor Hitch, ZA-1130, which is placed on the rear of the first binder. The first binder must be drawn by a McCormick Stub Tongue Tractor Hitch, Z-1353 (Illust. 4), except when pulled by a tractor larger than 10-20 H. P.*

### Steering Tongue Tractor Hitch to Order for the Second Grain Binder of Two of the Same Line

#### For Deering Grain Binder

ZDA-101 Deering Steering Tongue Tractor Hitch for the second binder of two. (See Illusts. 5 and 6.) Fits New Ideal or Deering binders. (Left hand.)

#### For McCormick Grain Binder

ZA-1130 McCormick Steering Tongue Tractor Hitch (see Illusts. 7 and 8) for the second binder of two. Fit right or left-hand. Improved (flat frame) binders.

### Tractor Hitch for Three or More Grain Binders

When a tractor hitch is to be used with a large tractor (larger than 10 h. p.) for pulling grain binders, it is necessary that the first binder and all the following binders be equipped with steering tongue tractor hitches.

### One Man Binder Control Tractor Hitch

The one man binder control tractor hitch can be used with a McCormick-Deering 10-20 or 15-30 tractor or other tractors of similar sizes. The operator sits on the seat of the tractor. The levers for raising and lowering the reel, tilting the platform, and shifting the binding attachment can be reached from the tractor seat. The bundle carrier is tripped by a rope. The one man binder control tractor hitch can be used on the first binder of two.

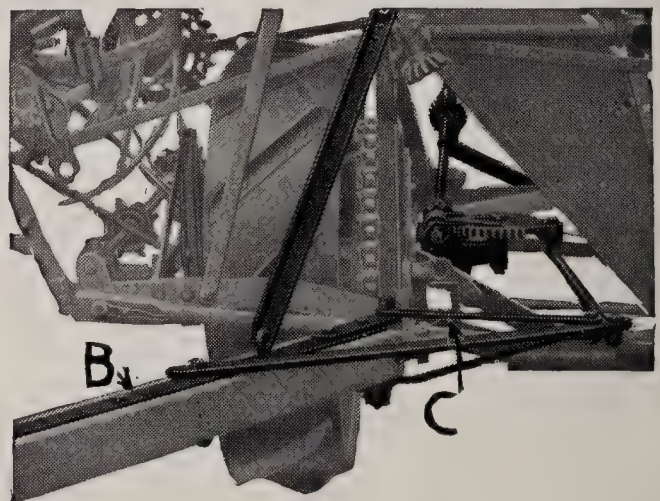
### How to Order One Man (Binder Control) Tractor Hitches

#### For McCormick Improved Left-Hand Binder

Order one ZA-1500 McCormick One Man (Binder Control) Tractor Hitch.

#### For Deering New Ideal Left-Hand Binder

Order one ZDA-122 Deering One Man (Binder Control) Tractor Hitch.



*Illust. 8—Front view of McCormick Steering Tongue Tractor Hitch, ZA-1130, used on the second grain binder of two.*





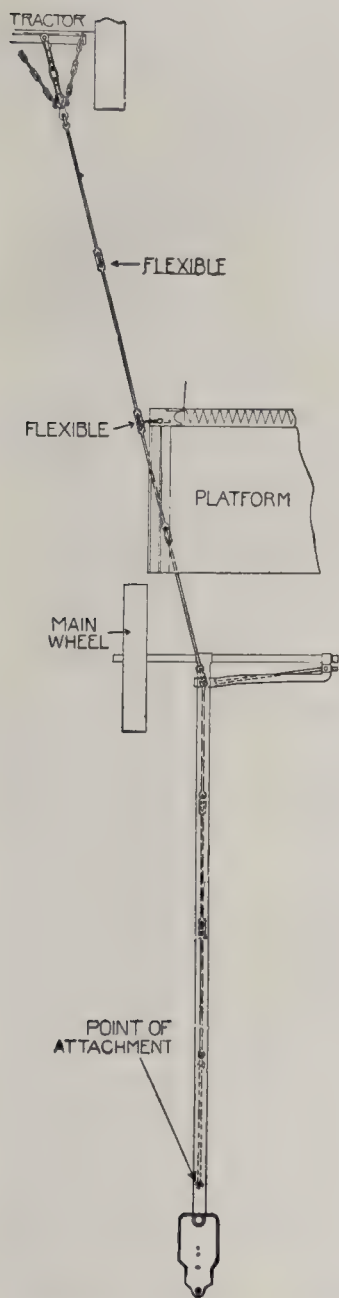
## Tractor Hitches

### Tractor Hitch for McCormick or Deering Push Machines

These hitches require a man on the tractor and a man on the header or push binder. In each case the tractor runs ahead of the push binder or header on the stubble of the previous round. The Deering hitch consists of a series of rods joined by links which make it a flexible hitch that pulls on a straight line from the center of the pole.

The McCormick hitch consists of heavy, flat steel bars pivoting on the axle and bent downward to clear the platform. These are connected to the tractor by a heavy steel rod.

*Illust. 9—Plan view of tractor hitch for McCormick-Deering and Deering push machines (ZDA-105).*



### Tractor Hitch for Two or More Mowers

The first mower is hitched to the tractor drawbar. The second mower is attached to the first by means of a bracket clamped to the axle of the first mower. The tongue of the second mower is a steering tongue and is also adaptable for length to accommodate different widths of cutter bars.

### Tractor Hitch to Order for Deering or McCormick Mowers

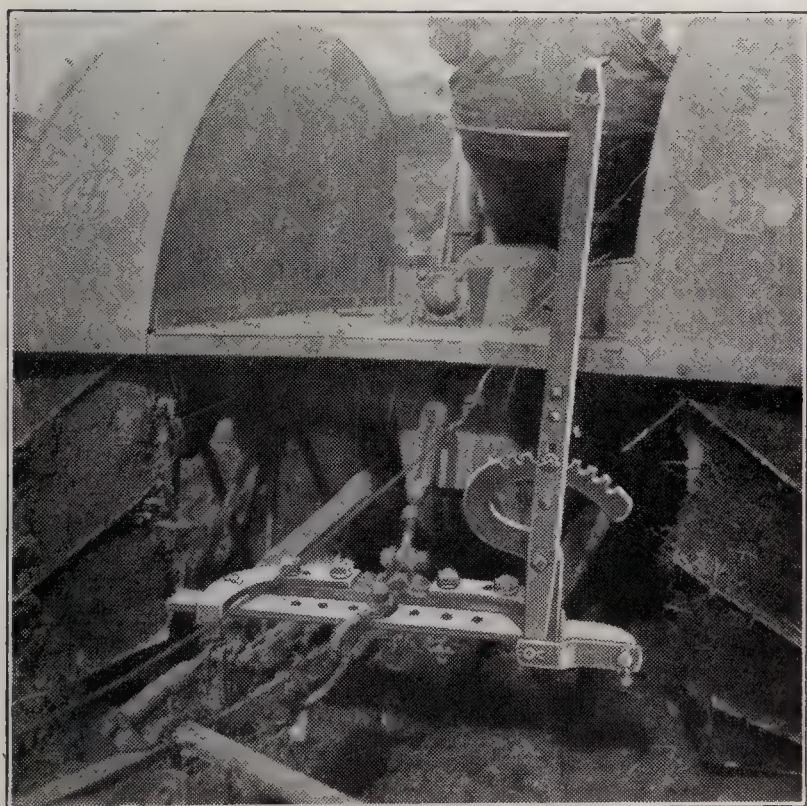
The following hitches will fit McCormick No. 4, New Big 4, No. 6 and Big 6 mowers, also Deering New Ideal, and New Ideal Giant mowers.

#### For First Mower

Z-1352—Stub Tongue Tractor Hitch for Mower. It is used on first mower next to tractor when small tractor is used (10-20 H. P.) For large tractors Z-1328, Steering Tongue Tractor Hitch should be used.

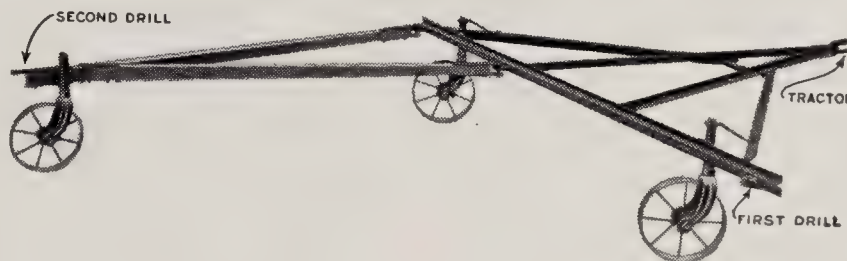
#### For Second or Additional Mowers

Z-1328—Steering Tongue Tractor Hitch for Mower. It is used on the second and additional mowers.



*Illust. 10—Adjustable plow hitch.*

This is one of the latest tractor hitches to be designed for use with McCormick-Deering tractors. It is for use when plowing, especially on rough or hilly ground. The lever which extends upward is placed within easy reach of the driver and can be used to vary the line of draft to overcome the tendency of the plow to slide down grade on steep hills.



*Illust. 11—General purpose tractor hitch.*

The triangular carriage shown here is the latest arrangement to be designed for general purpose hitching. While it was designed primarily for pulling two grain drills with the tractor it can be used for hitching many other combinations, such as disk harrows, peg-tooth harrows, spring-tooth harrows, packers, rollers, hay loaders and other field machines.

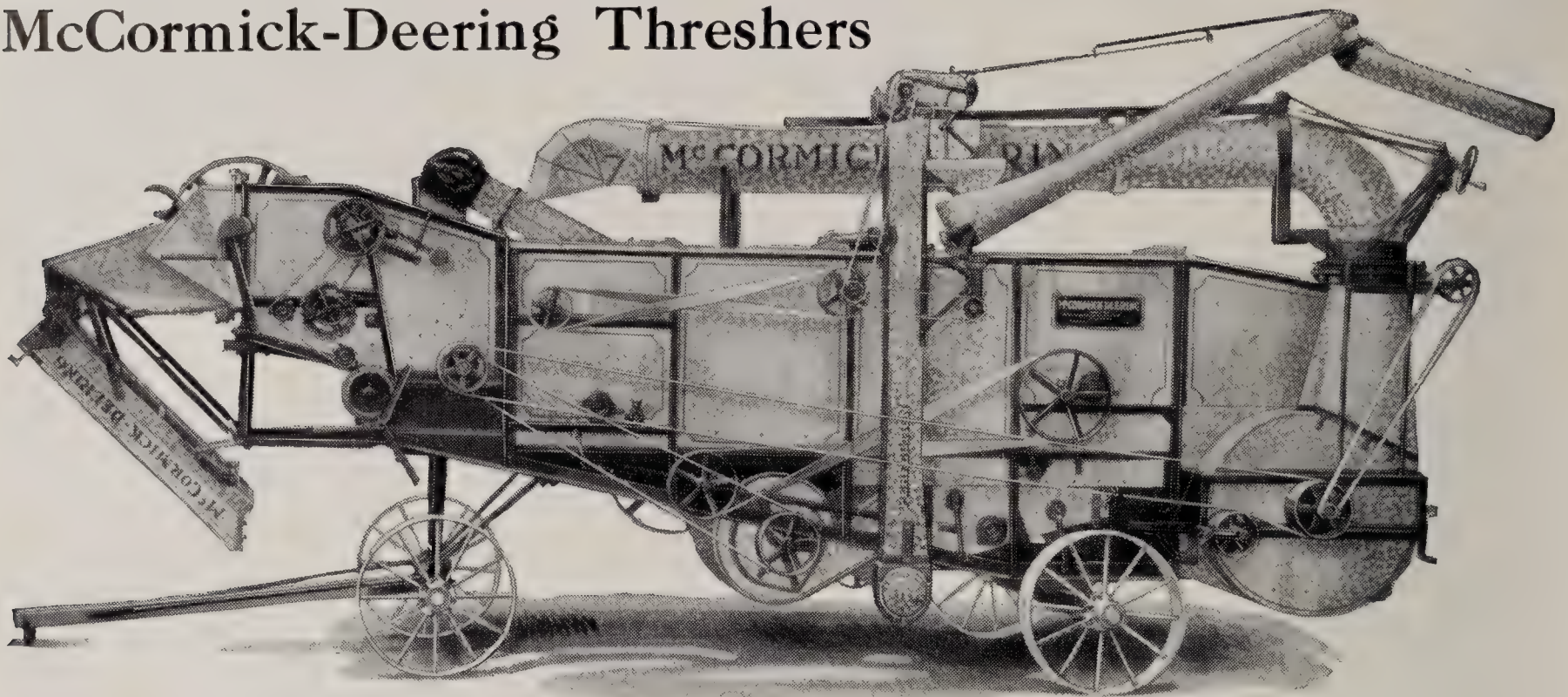
The construction of the hitch is strong and simple. It does not add materially to the draft of the tractor and is adjustable for use with almost any combination of implements. The extension and rear caster wheel can be used or removed as occasion requires. Whether it is used or not, the outfit can be turned in the field either way, left or right, as need be.

The hitch is carried high above ground which prevents it from catching or breaking on stumps.





## McCormick-Deering Threshers



*Illust. 1—Right side of McCormick-Deering All-Steel Thresher, made in two sizes, 22x38, and 28x46.*

### Regular Equipment

Combination tongue and stub pole. All belts except main driving belt to engine. Rockwood paper cylinder pulley,  $9\frac{1}{4}$  inches in diameter with  $8\frac{1}{2}$ -inch face. 1 chaffer sieve and extension. 1 Closz adjustable sieve for all grains. 1 weed screen for shoe bottom.

When stated on original order, one flax, timothy or any other one sieve in place of weed screen.

Register for 22 x 38 is Perfection 100-inch, and for 28 x 46 is Perfection 105-inch.

### Extra Equipment

Hand feed, rake stacker for all sizes. Perfection, 95-inch, 100-inch or 105-inch Register. Clover attachment. Pea and bean attachment. Alfalfa and clover attachments. Alfalfa and clover re-cleaner. Special sieves at extra cost for kafir, cane, milo, feterita, and timothy. Extra sieves for threshing other grains and seeds on special order. Brake. Wheels with 8-inch tires. Cylinder pulleys with lagging, 7, 8, 10, 11, 12, 13, 14, 15-inch diam.,  $8\frac{1}{2}$ -inch face for 22x38 and 28 x 46 only.

### Specifications

	22 x 38	28 x 46		22 x 38	28 x 46
Width of cylinder.....	22"	28"	Height of 9-ft. feeder carrier—		
Width of separator inside.....	38"	46"	low adjustment.....	5' 6"	5' 6"
Number of bars in cylinder.....	12	12	Height of 9-ft. feeder carrier—		
Number of teeth in cylinder.....	72	92	high adjustment.....	6'	6'
Diameter of cylinder including			Height of 14-ft. feeder carrier—		
teeth.....	21 $\frac{1}{8}$ "	21 $\frac{1}{8}$ "	low adjustment.....	3' 11"	3' 11"
Speed of cylinder: R. P. M.....	1100	1100	Height of 14-ft. feeder carrier—		
Diameter of cylinder shaft.....	2"	2"	high adjustment.....	6' 8"	6' 8"
Cylinder shaft bearings.....	Ball	Ball	Capacity bu. per hour—Wheat.	65 to 130	80 to 160
Length of grate surface.....	33"	33"	Capacity bu. per hour—Oats....	110 to 220	140 to 280
Diameter main drive pulley			Horse power to operate thresher		
regularly supplied.....	*9 $\frac{1}{4}$ "	*9 $\frac{1}{4}$ "	with hand feed and folding		
Face main drive pulley.....	8 $\frac{1}{2}$ "	8 $\frac{1}{2}$ "	stacker.....	16	22
Length of strawracks on straight			Horse power to operate thresher	McC.-D.	McC.-D.
line.....	10' 10"	10' 10"	with wind stacker self-feeder	10-20	15-30
Length of grain pan chaffer and			and weigher.....	Tractor	Tractor
chaffer extension.....	13' 2"	13' 2"			
Straw rack surface, square feet..	34 $\frac{1}{2}$	41 $\frac{1}{2}$			
Chaffer surface, square feet.....	13.1	16.1			
Each sieve surface, square feet..	9.5	11.75			
Length with self-feed and wind					
stacker (folded).....	23'	23'			
Height of machine at rear (over					
stacker pipe).....	9' 5"	9' 5"			
Height of machine at deck.....	7' $\frac{3}{4}$ "	7' $\frac{3}{4}$ "			
Height of front wheels.....	30"	30"			
Width of front wheels.....	6"	6"			
Height of rear wheels.....	30"	30"			
Width of rear wheels.....	6"	6"			
Tread of front wheels.....	54"	54"			
Tread of rear wheels.....	76"	84"			
Diameter of wind stacker pipe,					
inside.....	12 $\frac{1}{2}$ "	12 $\frac{1}{2}$ "			
Length of wind stacker pipe,					
extended.....	18' 3"	18' 3"			

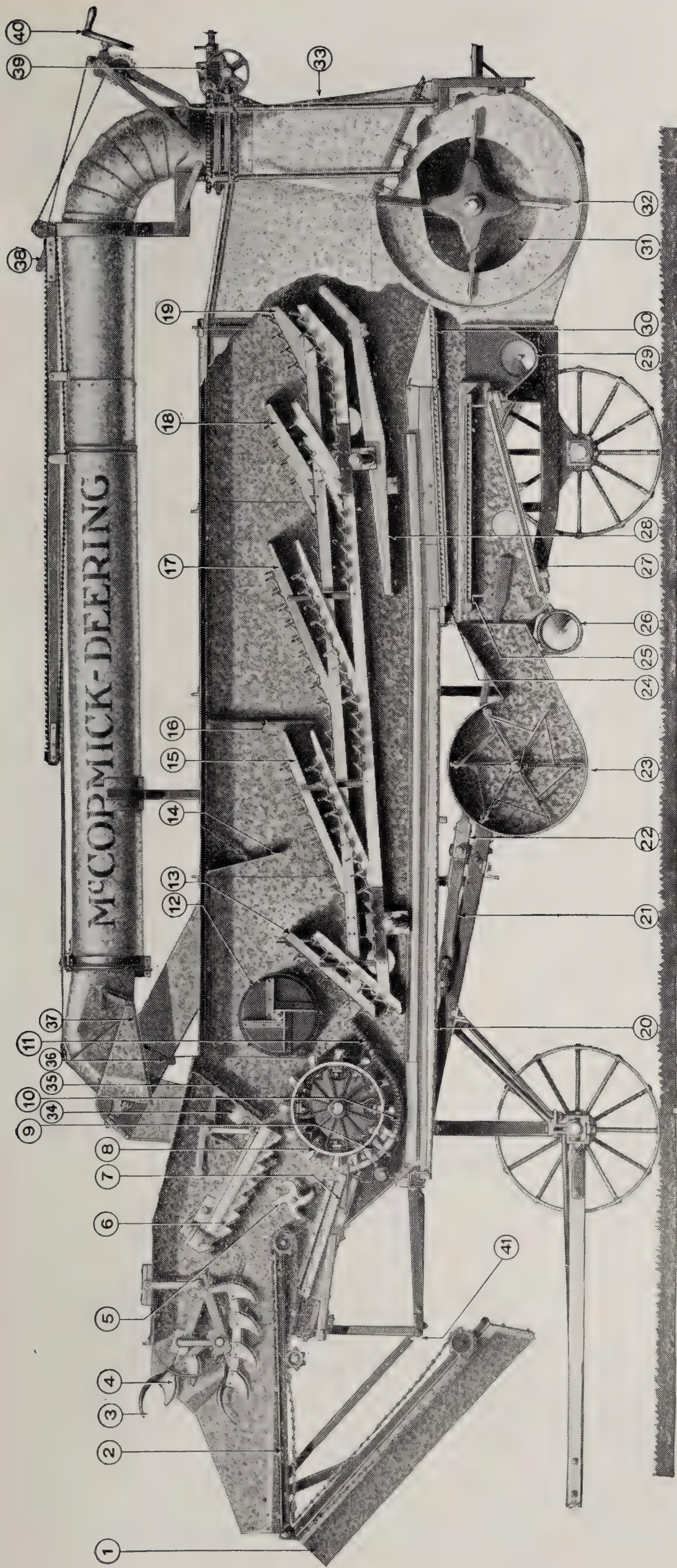
\*Rockwood paper pulley regularly supplied. Other size pulleys are iron and are lagged.

Dimensions and weights in this table are approximate.

### WEIGHT OF THRESHER ATTACHMENTS

Thresher fully equipped.....	5200 lb.	5425 lb.
McCormick-Deering feeder, 9-ft.		
carrier.....	725 "	815 "
McCormick-Deering feeder,		
14-ft. carrier.....	812 "	914 "
Perfection Register with swing-		
ing conveyor.....	365 "	400 "
Perfection wagon loader with		
swinging conveyor.....	290 "	290 "
Wind stacker.....	750 "	780 "





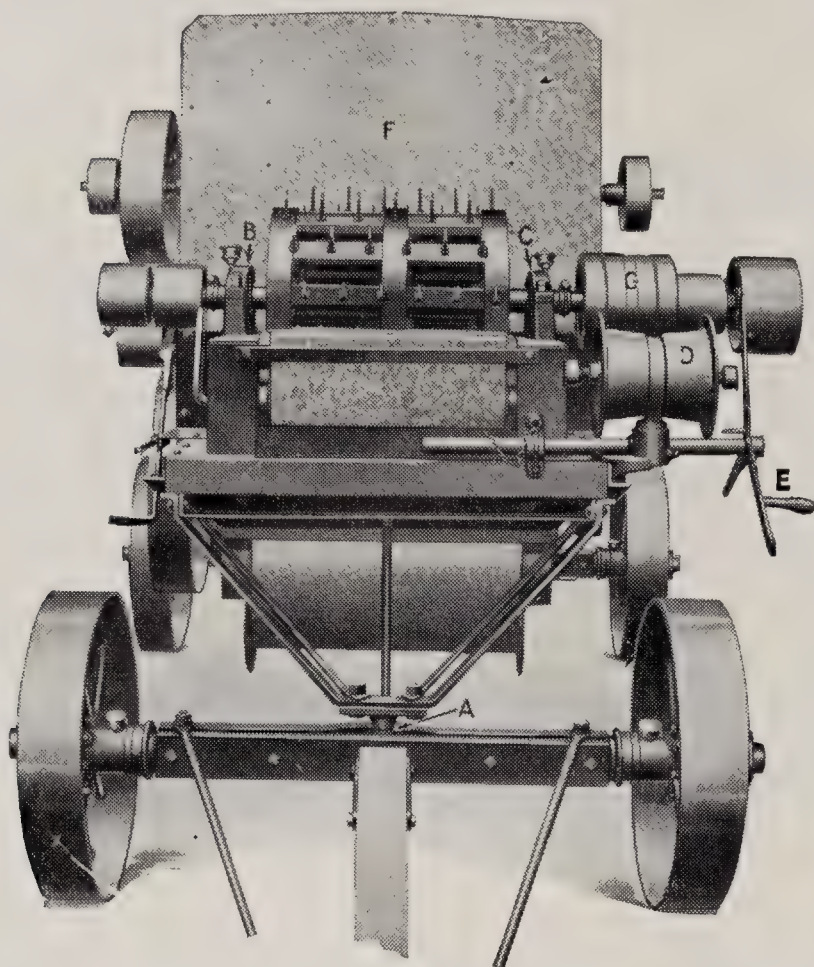
*Illust. 1-A—Interior view of McCormick-Deering threshing machine from right side.*

1. Feeder carrier.—One man can fold it.
2. Feeder conveyor.—High-grade steel chains and hardwood slats.
3. Hooks on knife arms.—Help to carry grain into the feeder.
4. Band cutting knives.—High-grade steel with serrated edges.
5. Retarders.—Hold lower part of bundle while top is combed off by feeding pans.
6. Upper feeding pans.—Comb grain off gradually into cylinder. Operate volume governor.
7. Lower feeding pan.—Saves grain threshed out in feeder.
8. Cylinder.—Steel bars set in cast-iron heads. High-grade teeth. Runs on ball bearings.
9. Toothed concaves.—Adjustable from outside.
10. Grate concave.—Interchangeable with toothed sections for threshing various grains.
11. Grate.—90 per cent. of separation of grain takes place here and on concaves.
12. Beater.—Helps to pass straw to straw rack. Prevents winding.
13. First straw rack riser.—Gives straw a considerable drop, which assists in separation.
14. Steel check flap.—Retards straw thrown back by cylinder. Adjustable from outside.
15. Second straw rack riser.—Tosses and drops straw.
16. Adjustable canvas check flap.—Retards straw in passing over straw rack.
17. Third straw rack riser.
18. Fourth straw rack riser.
19. Fifth straw rack riser.—All risers have same function of tossing and dropping straw.
20. Grain pan.—Catches threshed grain from cylinder and straw rack. Passes it on to chaffer. Corrugated steel bottom.
21. Pitman.—Operates grain pan. High-grade hardwood.
22. Pitman.—Operates shoe. High-grade hardwood.
23. Cleaning fan.—All steel and iron structure. Adjustments to regulate and direct blast.
24. Chaffer.—Adjustable for all grains and seeds.
25. Shoe sieve.—Adjustable for threshing all grains and seeds.
26. Grain auger.—Delivers threshed grain to weigher or elevator.
27. Weed screen.—Gives grain final cleaning. Eliminates weed seeds.
28. Return pan.—Steel bottom. Saves grain shaken out on last one-third of straw rack.
29. Tailings auger.—Catches unthreshed heads and delivers them to tailings elevator, thence back to cylinder.
30. Chaffer extension.—Openings, and angle to chaffer adjustable.
31. Wind stacker.—Located on outside of threshing machine to give clear passage to chaff from sieves.
32. Wind stacker fan.—Roller bearings. Offset blade gives highly efficient blast.
33. Stacker pipe.—Section removable for cleaning.
34. Tailings spout.—Delivers tailings from elevator to cylinder.
35. Tailings distributor.—Distributes tailings evenly across cylinder.
36. Tailings elevator.—All-steel construction. Tension of chains adjustable.
37. Wind stacker hood.—Adjustable from turret end.
38. Adjusting crank.—For extending stacker pipe.
39. Stacker oscillating pulley.—Drives stacker automatic oscillating device.
40. Adjusting crank.—Raises and lowers stacker pipe.
41. Feeder support.—Permits adjustment of carrier for height.





## McCormick-Deering Threshers



*Illust. 2—Front view of thresher. A, ball and socket joint on which front truck swivels. B and C, cylinder ball bearing. D, belt guide, E, belt reel. F, solid steel front sheet. G, Rockwood paper driving pulley.*

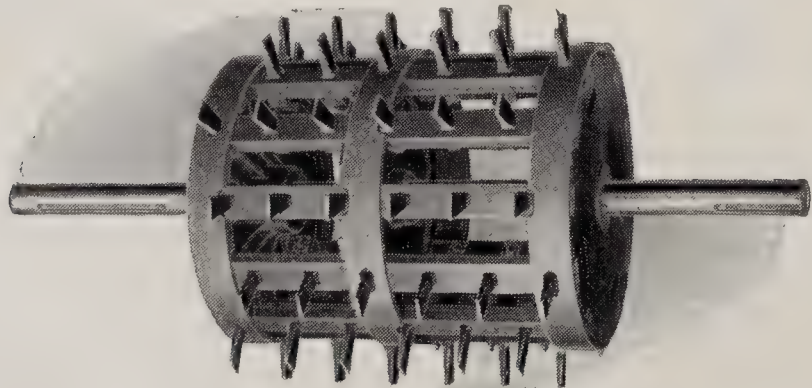
### Rugged Steel Construction

McCormick-Deering threshers are built almost entirely of steel. Large angles, firmly riveted together, and securely braced, form a frame that has a wide margin of strength, yet is not heavy.

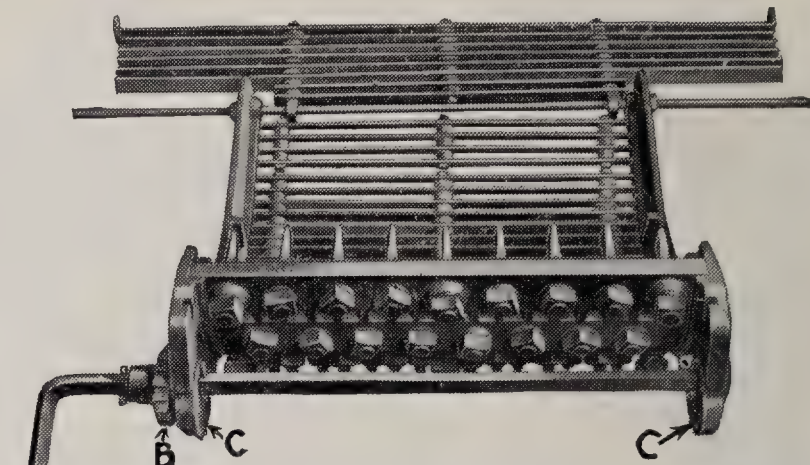
The siding is all galvanized steel cut and formed to assist in reinforcing the frame. An example is the front which is one sheet of heavy gauge metal securely riveted to the frame. This stiffens the construction of the front and overcomes twisting due to rough roads and fields.

A heavy gauge sheet, formed at a right angle and riveted to the frame members at the back and bottom, stiffens the body at that point. Even the roughest roads do not distort the frame or siding. The upper corners at the rear end are braced with angles.

The axles are built of 5-inch channels, bolted together, the front truck turning all the way round on a ball and socket joint. The wheels are built up of steel on cast-iron hubs and have 6-inch tires.



*Illust. 4—The cylinder is constructed so as to give the maximum threshing capacity, combined with strength and the ability to maintain good balance.*



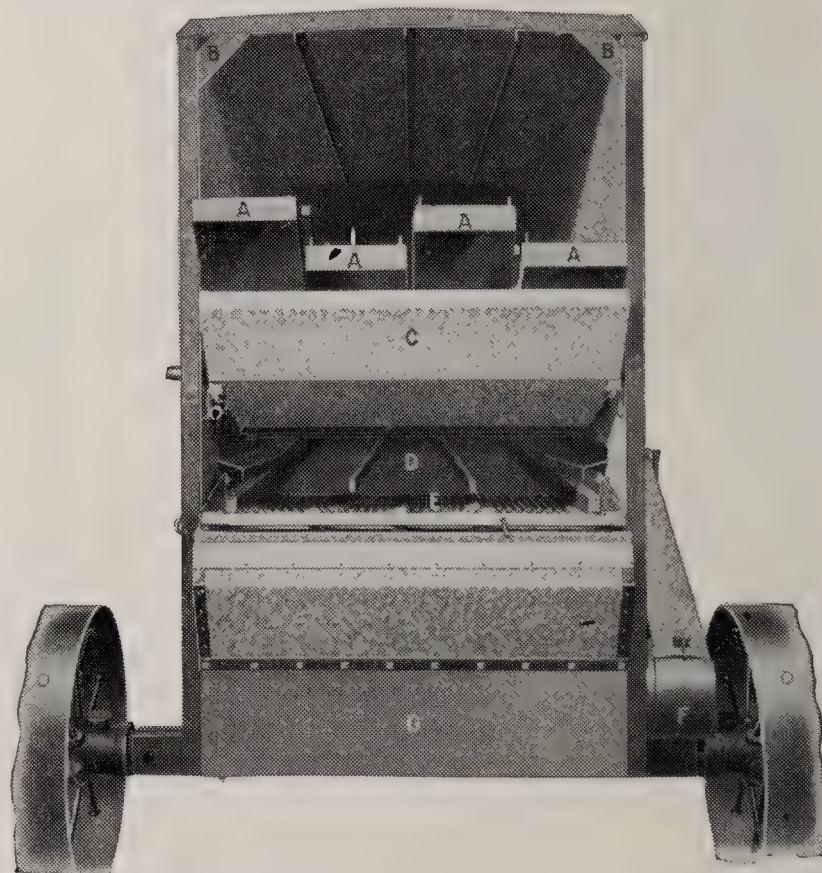
*Illust. 3—Concave and grate. A, adjusting lever for raising and lowering concave. B, ratchet that holds concave in adjustment. C, eccentrics which raise and lower concave sides.*

### Substantial Cylinder and Concave

The cylinder is built up in the most approved manner on cast-iron heads and a center casting. Double steel bars are set into slots around the circumference and the high-grade steel teeth have square shanks which fit into square holes in the bars so that when bolted in place they cannot turn. The holes in the cylinder heads to receive the shaft are reamed to size, making a force fit for the 2-inch shaft which is also securely keyed.

### Concave Adjustable from Outside

The concave is adjustable endwise by means of set screws in the sides of the cylinder supports. This permits easy alignment of cylinder and concave teeth. A lever operating eccentrics under each concave side adjusts the depth to which the concave and cylinder teeth mesh. After adjusting, a pawl in connection with a ratchet holds the concave where it is set.

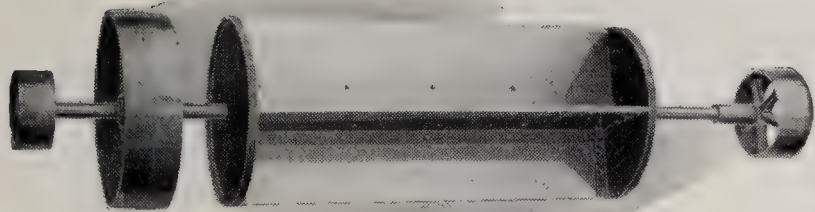


*Illust. 5—Rear view of thresher with wind stacker removed. A, straw rack. B, corner braces. C, return pan. D, chaffer. E, chaffer extension. F, tailings elevator. G, angle sheet which stiffens rear end.*





## McCormick-Deering Threshers



*Illust. 6—Beater, located just back of cylinder. It throws the straw down on the straw rack as it comes from the cylinder and prevents winding of straw.*

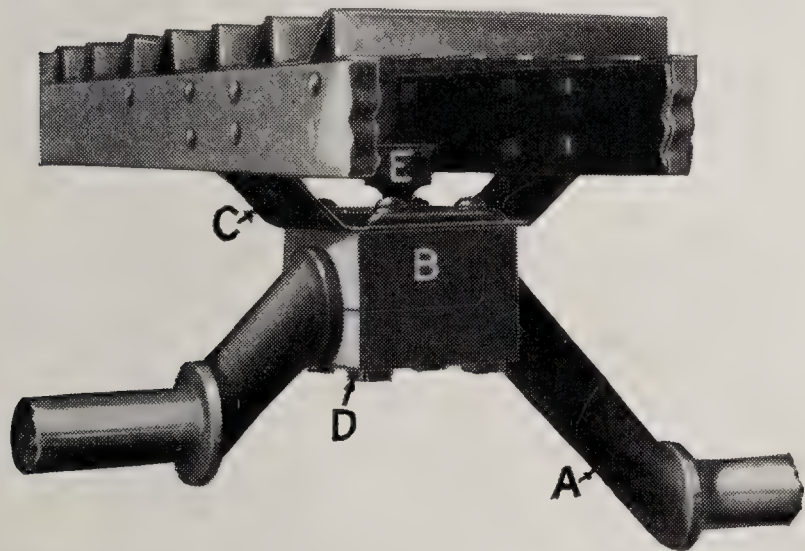
### Beater Assists in Separation

The beater is mounted directly back of the cylinder and the blades swing close to the cylinder teeth. The purpose of the beater is to reduce the velocity and to direct the straw down upon the straw rack so that the entire length of the rack will be used in separating the grain. The beater also prevents the straw from winding about the cylinder.

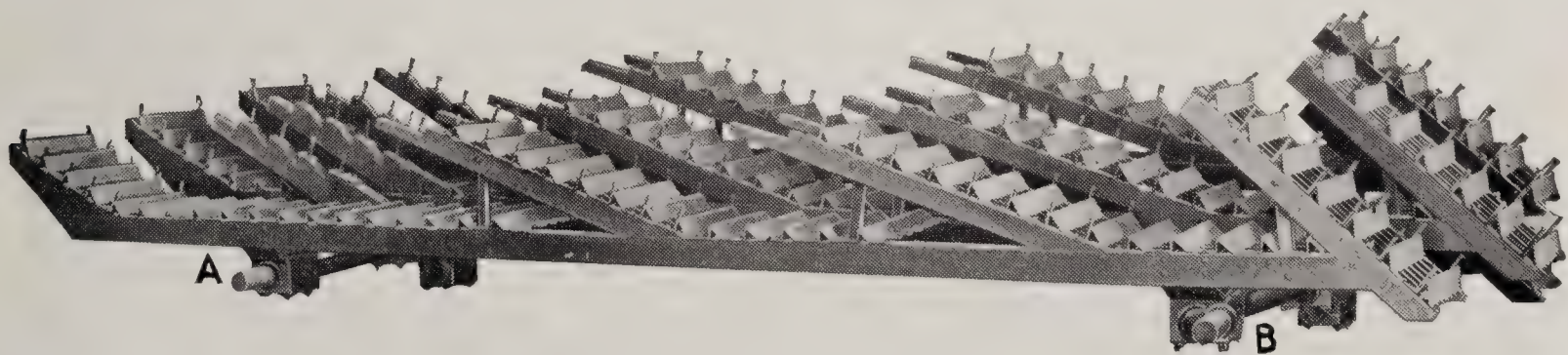
The beater is made entirely of sheet steel riveted to malleable iron hubs and mounted on a steel shaft. The side of the thresher is so made that by removing a few bolts a small portion can be taken off and the beater removed.

### Ball-Bearing Cylinder Eliminates Frequent Adjustments

Every thresherman knows that the plain bearing thresher cylinder requires frequent adjustments to take up wear and keep the cylinder teeth in alignment. No adjustments should be necessary on the ball bearings of the McCormick-Deering, except in



*Illust. 8—Single section of straw rack. A, crankshaft. B, wooden box. C, steel saddle. E, grease cup. D, locking device for bearing nuts.*

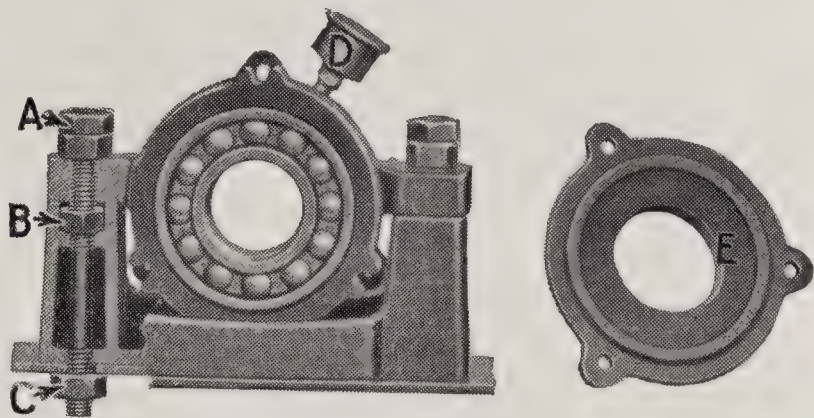


*Illust. 9—Four-section straw rack. Note the five risers, four of which gives a 10-inch drop to straw, and steel pins which comb straw apart. A and B, four-way crankshaft.*

rare cases, for the ball bearings do not wear perceptibly or permit the cylinder to get out of alignment. One oiling a day is ample for the cylinder and the frequent inspection which is always necessary with plain bearings is a task unknown with ball bearings.

### Bearings of Generous Proportions

The ball bearings used on the cylinder shaft of McCormick-Deering threshers are amply large to resist the strain of threshing. They are contained in heavy cast-iron housings that are dust-tight. These housings are rigidly bolted to the cylinder side frames. While a means of endwise adjustments is provided for these bearings, it should rarely if ever be necessary to use it, for the bearings are correctly set at the factory and nothing short of an accident should require a change in their adjustment.



*Illust. 7—Cast-iron housing in which cylinder ball bearings are held. A, shows two nuts for holding bearings in supporting frame. B and C, show how supporting frame is bolted to frame of thresher. D, grease cup. E, cover for bearing.*

### Straw Racks Enforce Separation

Complete separation of the grain, for which McCormick-Deering threshers are famous, is largely due to the peculiar motion of the straw racks. In most threshers the straw is agitated by a simple swaying or up-and-down motion of the straw racks, but in the McCormick-Deering the racks toss and shake the straw so that the grain is thoroughly separated. This peculiar motion is accomplished by means of two crankshafts with four cranks formed in them, each crank set at a different angle, so that no two of the sections stand exactly in the same position at the same time. Steel pins are fitted to the risers and the straw is not only lifted, tipped sideways and dropped, but is pulled apart by the pins and fed out evenly over the entire surface of the racks.

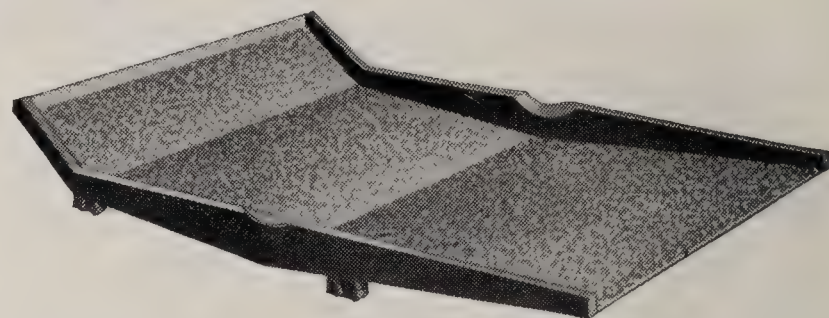




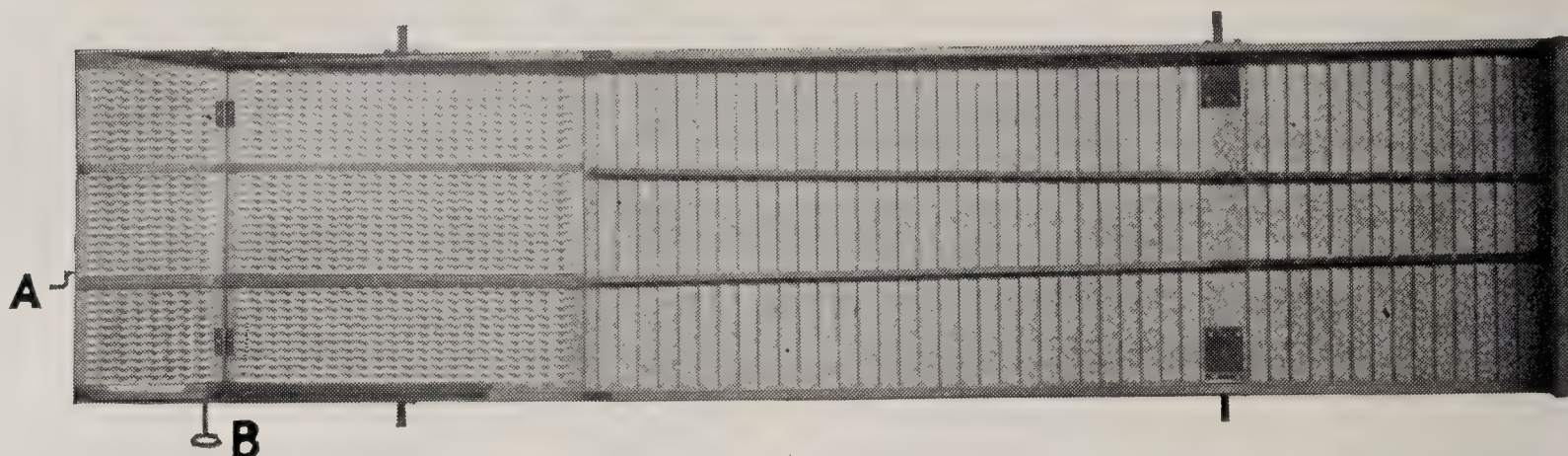
## McCormick-Deering Threshers

### Return Pan Saves Grain

Directly under the rear end of the straw racks is the return pan. Its duty is to catch any grain that may not have been shaken out of the straw during its travel over the first two-thirds of the straw rack and return it to the grain pan in front of the chaffer. In the McCormick-Deering the return pan is unusually long, is made of heavy steel and has a hardwood frame.



*Illust. 10—Return pan which delivers grain falling through last one-third of straw rack to chaffer.*



*Illust. 11—Grain pan, chaffer and chaffer extension. A, adjustment for chaffer extension. B, adjustment for chaffer.*

### Grain Pan Slants Six Inches

The grain pan is hung so that it slants from the front to the rear about six inches. This, with the motion imparted from the cranks and pitmans, causes a continuous, even motion of the grain over the grain pan. The pan is divided by two lengthwise strips which keep the mass of chaff and grain evenly spread out until it reaches the chaffer. The pan is made of heavy galvanized steel and the edges are turned up over the wood frame member to prevent leaking.

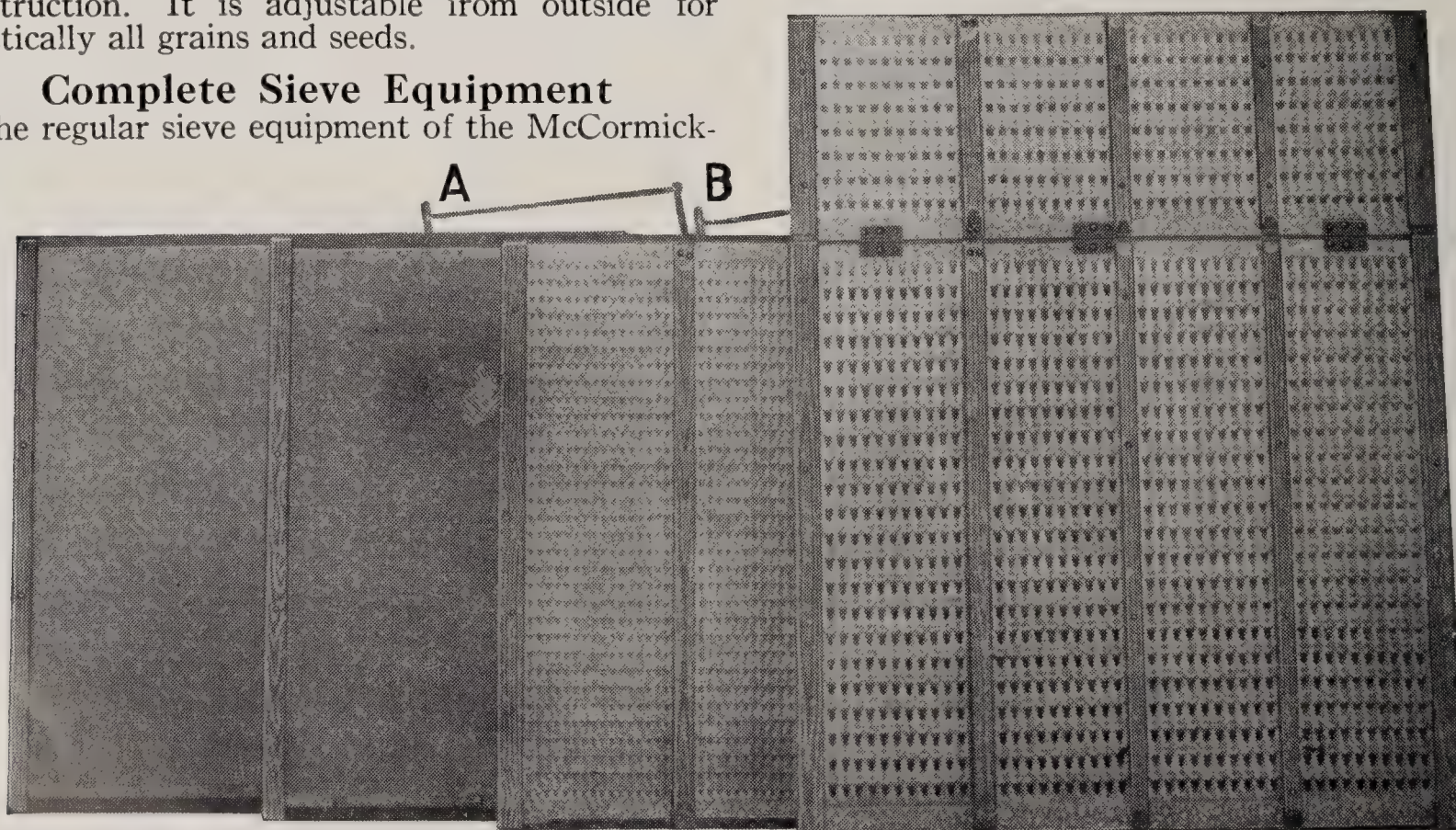
### Chaffer Sieve Adjustable

The chaffer sieve is of the well-known Closz type and is equipped with an extension of the same construction. It is adjustable from outside for practically all grains and seeds.

### Complete Sieve Equipment

The regular sieve equipment of the McCormick-

Deering thresher consists of one Closz adjustable chaffer and extension, and Closz adjustable sieve for all grains and many seeds, and one weed screen for shoe bottom. When so stated on the original order, the purchaser may have a choice of either a timothy or flax sieve or any one of the special sieves in place of the weed screen. If more than one is ordered, the extra sieve will be charged for. A clover or alfalfa sieve is supplied at extra cost with the clover attachment listed under extra equipment. Sieves for threshing other grains will also be supplied on special order. These sieves are all of extra good quality, with sturdy frames and heavy metal in the chaffers and adjustable sieves.



*Illust. 12—Sieve equipment usually supplied with McCormick-Deering Thresher. A, adjustment of shoe sieve. B, adjustment of chaffer.*

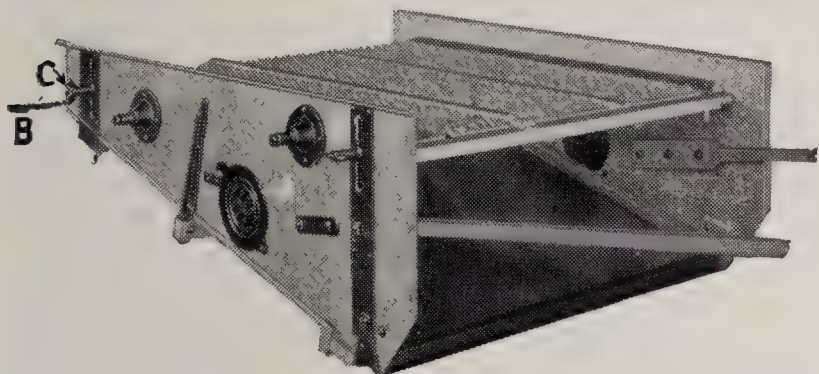




## McCormick-Deering Threshers

### Efficient Fan

The cleaning fan is so shaped that the blast of air is drawn in from the sides and evenly distributed the entire width of the sieves. The fan is made entirely of iron and steel, the supporting arms being cast into the hubs, and the sheet steel blades turn over on the edges to stiffen them.



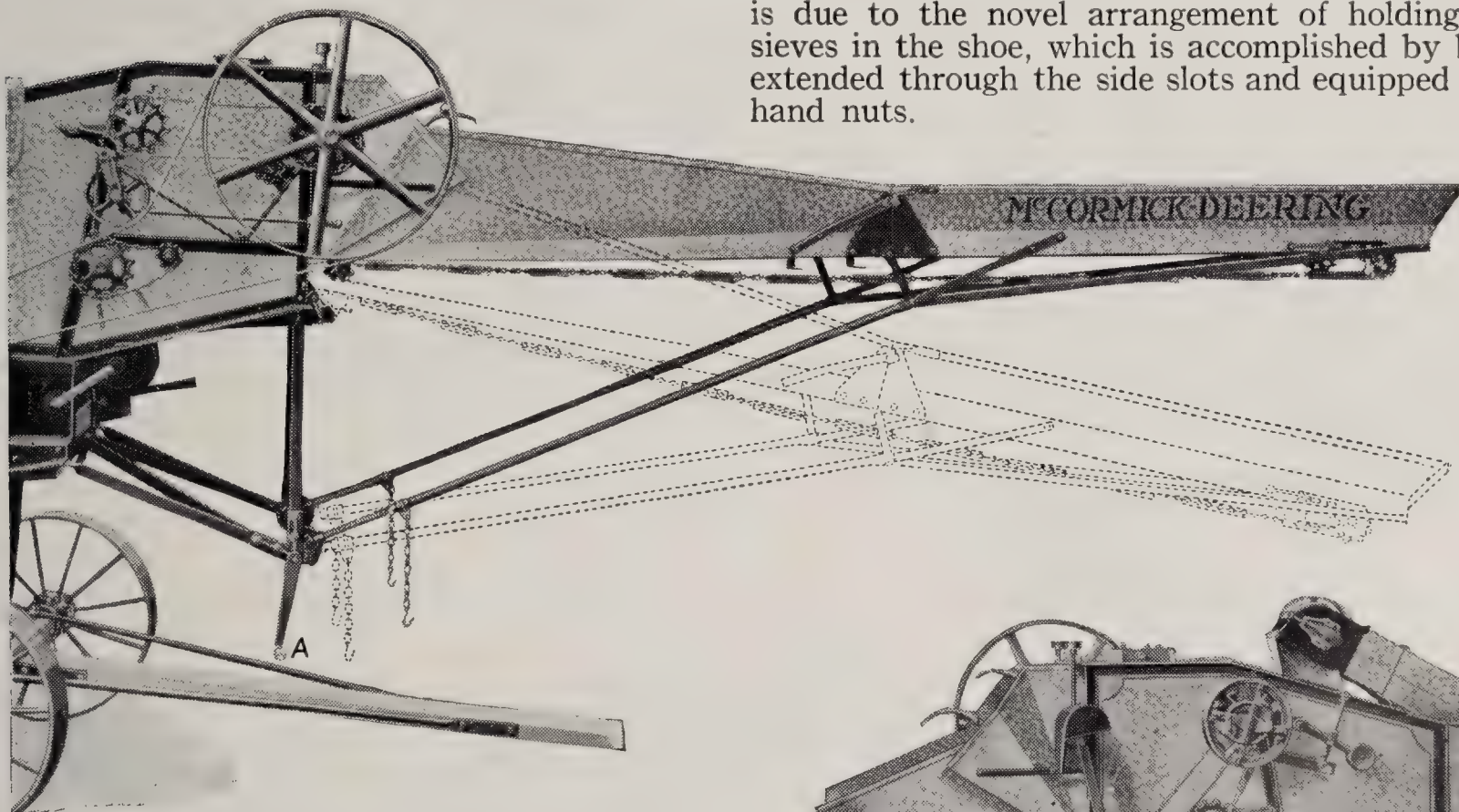
*Illust. 13—Shoe with sieves in place. A, handhole through which shoe can be cleaned while machine is in operation. B, adjustment for upper sieve. C and D, adjustments for front and rear ends of sieves.*



*Illust. 14—The fan is made entirely of steel and iron. The blades taper to secure an even pressure of air the entire width of the sieves.*

### Easily Adjustable Shoe

All adjustments on the shoe can be made while the machine is in operation and the sieves can be changed without crawling into the machine. This is due to the novel arrangement of holding the sieves in the shoe, which is accomplished by bolts extended through the side slots and equipped with hand nuts.



*Illust. 15—Left side of McCormick-Deering Feeder with 14-foot carrier. A, crank for raising and lowering carrier.*

### McCormick-Deering Feeder

The McCormick-Deering is one of the most efficient self-feeders ever built. It fits the machine exactly, because it is made for it, and there are no leaks which cause losses of grain. Two governors, one operating in connection with the speed of the cylinder and the other the volume of grain being fed to the machine, prevent overcrowding of the thresher. The feeder can be equipped with either 9 or 14-foot carrier, the 14-foot being supplied at extra cost. The 9-foot carrier is the more common type, but the 14-foot carrier permits feeding from both sides of the machine by two or four men, one or two feeding into the front end of the carrier, while the others feed into the rear. Both carriers are equipped with one-man folding device.

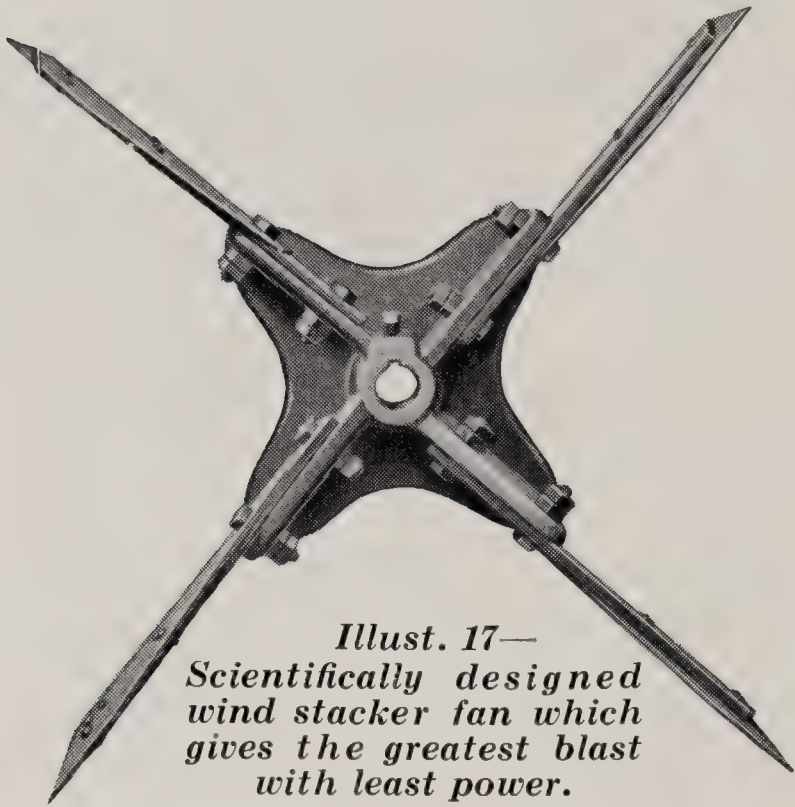


*Illust. 16—Right side of McCormick-Deering Feeder, folded for transportation. 9-foot carrier.*





## McCormick-Deering Threshers



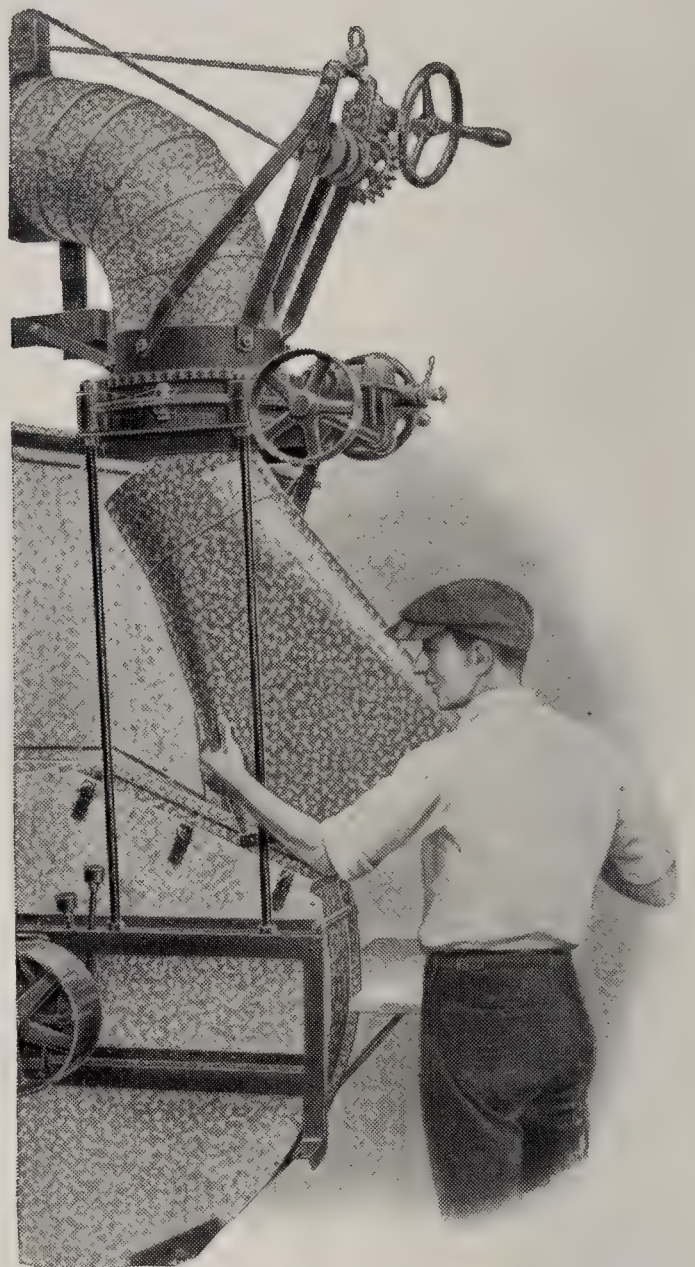
*Illust. 17—  
Scientifically designed  
wind stacker fan which  
gives the greatest blast  
with least power.*

### Unusual Type of Stacker Fan

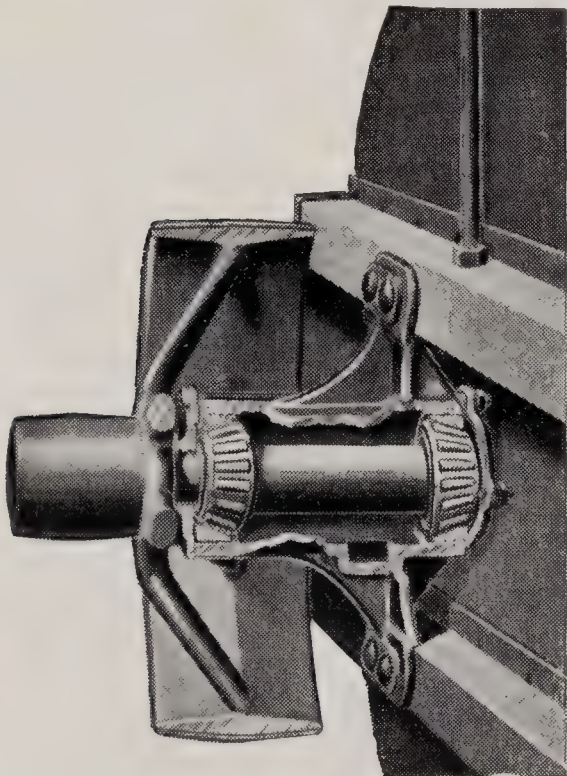
The stacker fan has four square-end blades. These blades are out of center with the shaft, and tipped slightly backward. This type of fan gives the maximum blast with the minimum power. The straw does not rub or wipe against the blower housing as often occurs with fans having curved blades.

### Stacker is Hand or Power Oscillated

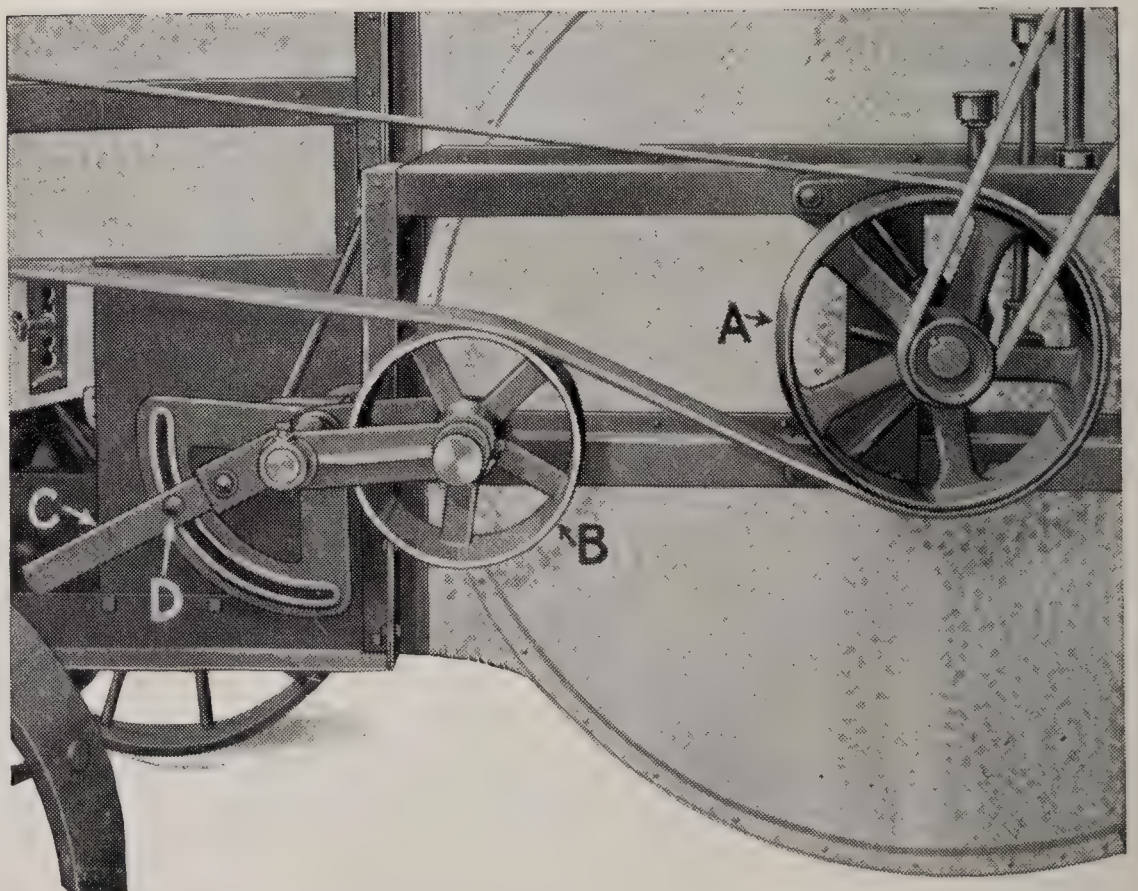
The stacker is equipped with an automatic oscillating device which can be thrown in or out of gear by means of a lever. This makes it possible to build semi-circular stacks automatically, or the pipe may be turned to any desired angle at will by means of the hand wheel.



*Illust. 18—A section of the blower  
pipe can be removed for cleaning,  
if necessary.*



*Illust. 19—Sectional view of  
wind stacker fan pulley and  
bearing. High-grade, tapered  
roller bearings are used at both  
ends of the shaft. The bearing  
is 9 inches long and the pulley  
is so constructed that the pull  
of the belt is between the bear-  
ings. This equalizes the strain  
and wear.*

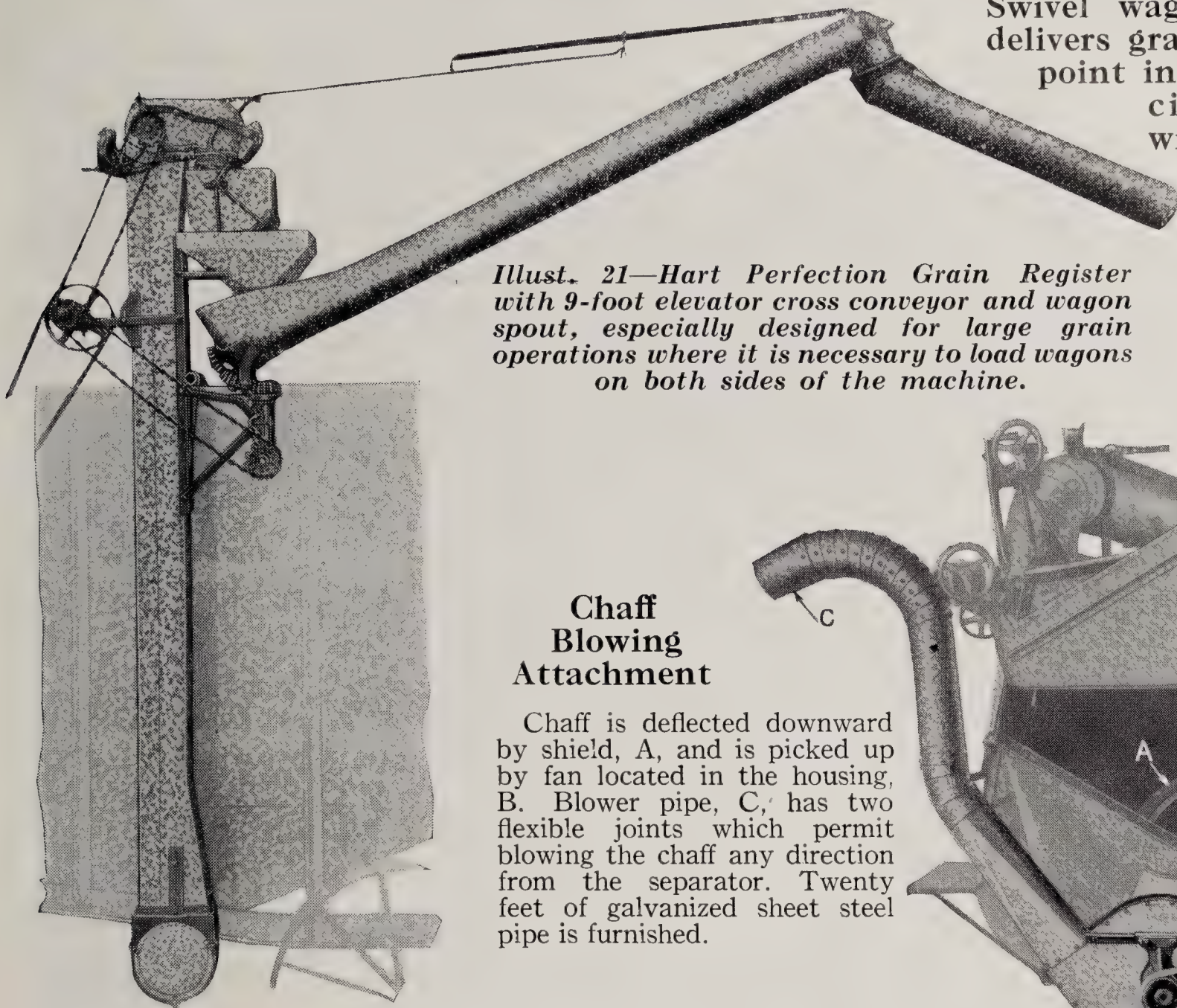


*Illust. 20—Drive of wind stacker fan. A, driving pulley.*





## McCormick-Deering Threshers---Attachments

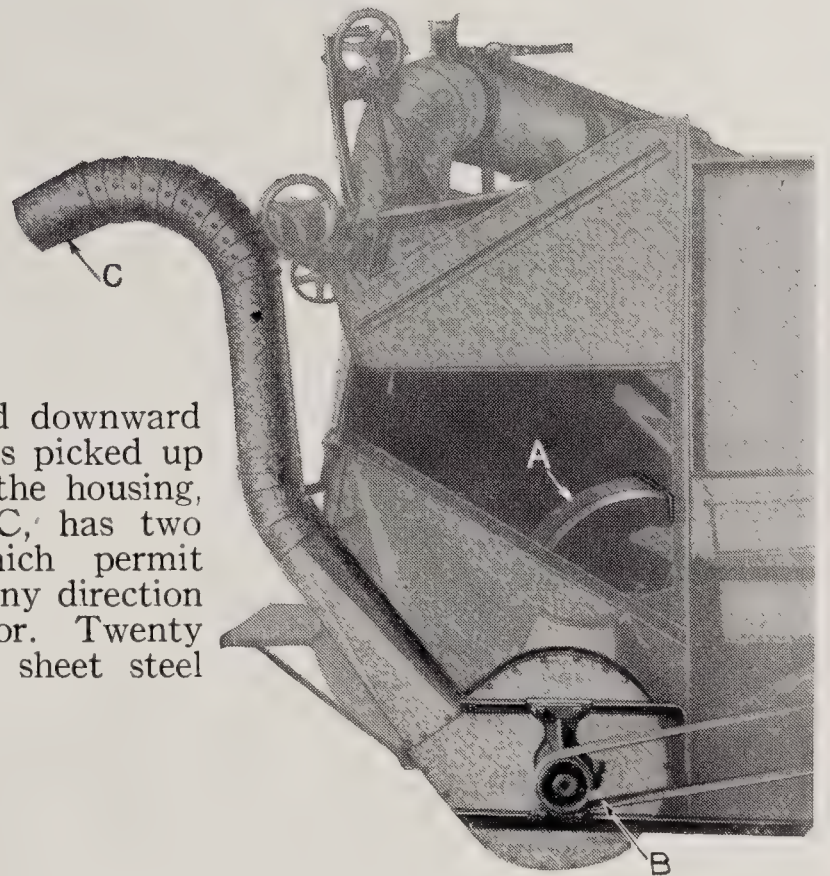


Swivel wagon spout delivers grain to any point in a 24-foot circle and will fill field bins 10 to 12 feet high.

*Illust. 21—Hart Perfection Grain Register with 9-foot elevator cross conveyor and wagon spout, especially designed for large grain operations where it is necessary to load wagons on both sides of the machine.*

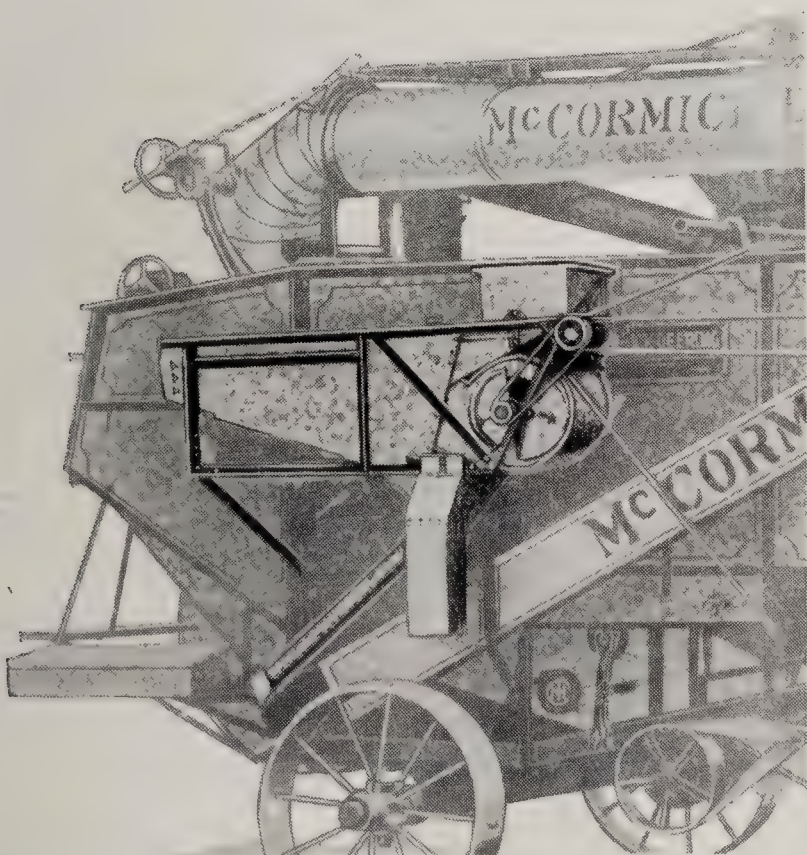
### Chaff Blowing Attachment

Chaff is deflected downward by shield, A, and is picked up by fan located in the housing, B. Blower pipe, C, has two flexible joints which permit blowing the chaff any direction from the separator. Twenty feet of galvanized sheet steel pipe is furnished.



*Illust. 22—For separating the chaff from the straw when it is desired to save the chaff or store it in a convenient bin, the special chaff blower attachment is a valuable aid.*

### Alfalfa and Clover Recleaner



*Illust. 23—View of recleaning attachment in position on left side of thresher.*

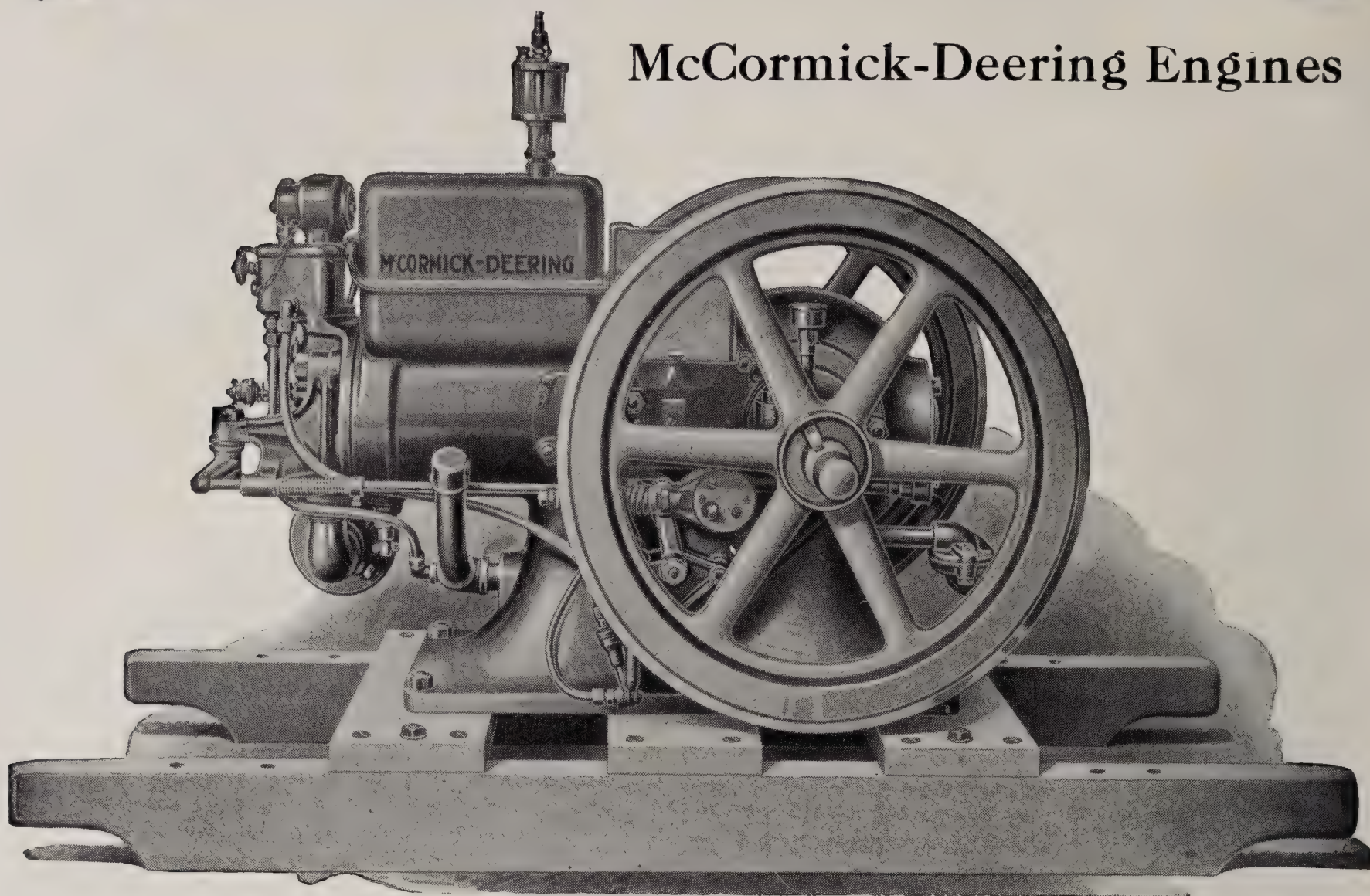
A McCormick-Deering alfalfa recleaning attachment can be attached to machines already in use, or purchased with new machines. For thorough cleaning of alfalfa, clover, and seeds of like nature, there is nothing on the market which will do better work or give the assurance that you are saving all the seed. With this recleaning attachment a great saving is possible inasmuch as no special alfalfa thresher or huller is required. It is supplied at extra cost.

The alfalfa seed is spouted over to the recleaner where it goes through practically the same cleaning process as it did in the thresher, only it is done more thoroughly. The sieves and screens are constructed especially for seeds of this character so as to spread out the seed well and give it constant vibration. This arrangement gives every opportunity for the seed to pass through, and at the same time all waste material is blown away by means of a fan.





## McCormick-Deering Engines

*Illust. 1—McCormick-Deering 1½ H.P. Engine.***Meet Farm Conditions**

McCormick-Deering engines are made of high-grade material throughout.

Simple construction makes easy operation.

When taken apart, the engine is in ten units or groups of parts; for instance, by removing four nuts the cylinder head comes off and with it the fuel mixer, valves, and other small parts. This means quick and easy repairs. The permanent alignment of all parts is insured by the base, crankcase and water-jacket being cast in one piece. This means increased years of service.

Well known valve-in-head construction.

Enclosed crankcase protects working parts.

Working parts readily accessible..

Four piston rings hold compression perfectly.

A removable cylinder makes repairs quick and inexpensive in case of scoring or other injury.

**Uses Low-Priced Fuels**

The McCormick-Deering 3, 6 and 10 H.P. Engines operate successfully on kerosene, distillate (39° Baume), or gasoline.

Mixer is located above cylinder. Gravity assists suction of piston in drawing fuel into cylinder.

Water used with fuel.

Throttle governor maintains constant speed.

A safe engine—fuel is pumped to mixer, excess returned to fuel tank.

High-tension magneto used for starting and running—no batteries needed. (1½, 3, 6 H.P.)

Extra wide and heavy adjustable crank pin bearing, oiled by grease cup on end of crankshaft.

The crankcase is equipped with breather and drained of oil. This means a clean engine.

The flywheel keys are protected so that they cannot catch clothing.

**Regular Equipment**

High-tension magneto on 1½, 3 or 6 H.P.

Skids on the 1½ and 3 H.P.

Skids on 6 and 10 H.P. when not portable.

Plain pulleys on 1½ and 3 H.P.

No plain pulleys for 6 and 10 H.P. engines are shipped regular unless ordered, but plain pulleys from 6 to 18-inch diameter, inclusive, will be furnished with the 6 H.P. engine and from 6 to 26 inches in diameter with the 10 H.P. engine, if specified, without additional cost. Additional charge will be made for larger-sized plain pulleys.

Tools.

**Extra Equipment**

Plain pulleys (see pulley list).

Friction clutch pulleys for 3, 6 and 10 H.P.

Four-wheel truck (1½ and 3 H.P.).

Horse truck (6 and 10 H.P.).

Pump jack. Brake for horse trucks.

**Specifications—McCormick-Deering Engines**

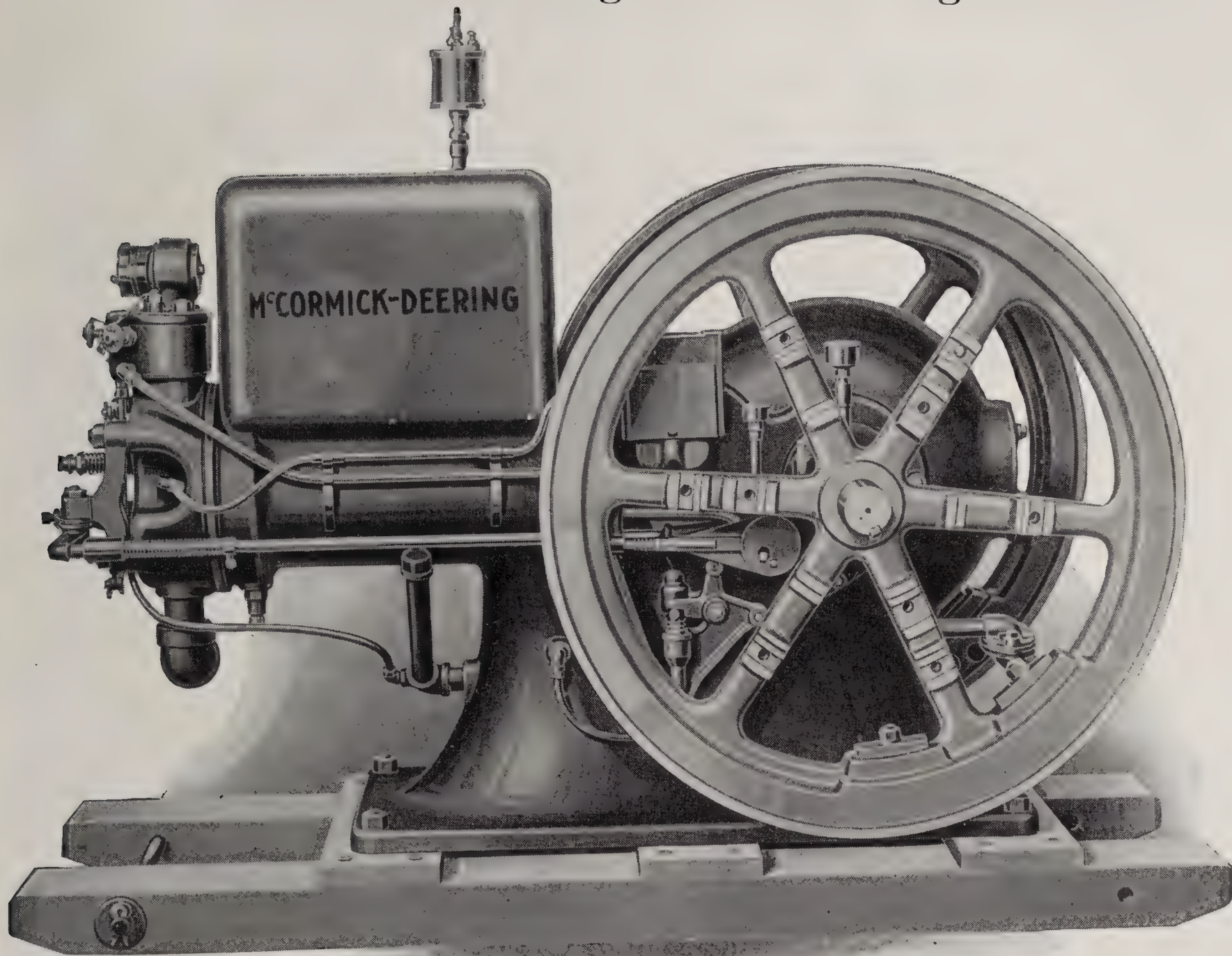
Rat'd H.P.	Sp'd R.P. M.	Bore In.	Str'k In.	Size of Plain Pulley Inches		Flywheel Inches		Fuel Tank Gal.	Hop- per, Gal.	Floor Space and Height without Skids			Floor Space and Height with Skids			Approx. Wt. Lbs.
				Diam.	Face	Dia.	Face			Lgth. In.	Wdth. In.	Hgt. In.	Lgth. In.	Wdth. In.	Hgt. In.	
1½	500	3⅝	4½	4	5½	18	1¾	15⅞	2¼	32⅜	26⅝	26	48	26⅝	30½	359
3	600	4⅛	5½	5	5½	21	2⅜	17⅞	3¾	37⅜	29¼	29½	54	29¼	34½	509
6	550	4¾	8	*14	*12¼	28	2½	37⅞	8	51¾	40⅛	36¼	54¼	40⅛	42½	895
10	425	6	10	*22	*10¼	40	3	112⅞	12½	67⅞	56½	46¾	90⅞	56½	55¼	2213

\*Recommended.





## McCormick-Deering Kerosene Engines



*Illust. 2—McCormick-Deering 6 H.P. Kerosene Engine with water-cooled cylinder head.*

### Construction

McCormick-Deering engines have the smallest possible number of parts. These parts are assembled in ten units or groups. For instance, by removing the cylinder head, the mixer and valves do not have to be disturbed. This plan of construction makes it possible for the owner to make repairs and put the engine back together without the danger of getting it out of adjustment.

### Crankcase

The enclosed crankcase protects the working parts from dust, dirt and grit, which adds materially to the life of the engine. The shape of the crankcase is such as to increase the strength.

### Accessibility

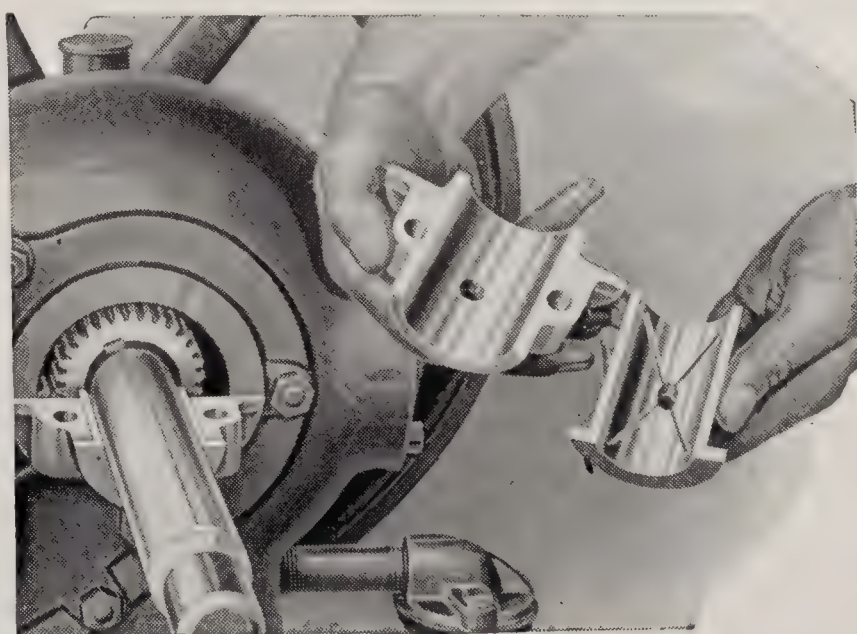
Although the working parts are carefully protected from dust and dirt, by removing hand-hole plates it is easy to get at the connecting-rod bearings or make any necessary adjustments.

### Piston and Connecting-rod

The pistons used in McCormick-Deering engines are made of high-grade special analysis grey iron. They are provided with four piston rings. Good compression adds to the economy of the engine. The connecting-rod is of the I-beam cross section, the strongest construction known.

### Large, Well-Made Bearings

All McCormick-Deering engine crankshaft bearings are made of antifriction metal. They are large and wide and the bearing metal is thick. When replacement is necessary it can be done easily because the bearings are removable.

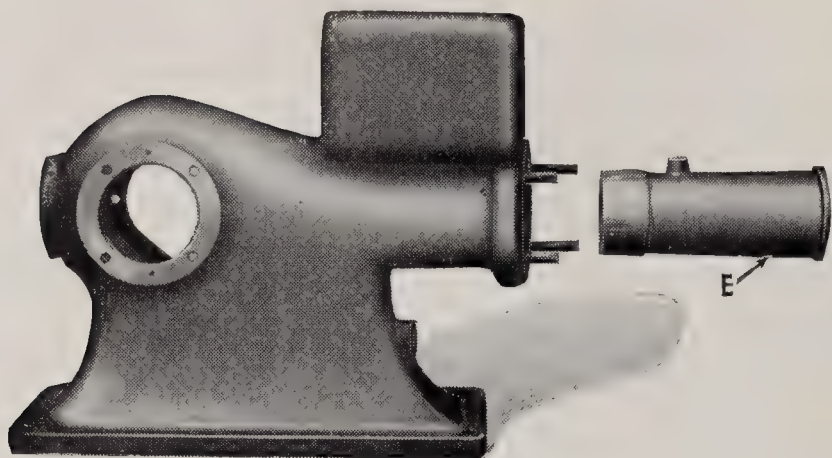


*Illust. 3—All McCormick-Deering Engines are made with large, removable main bearings.*





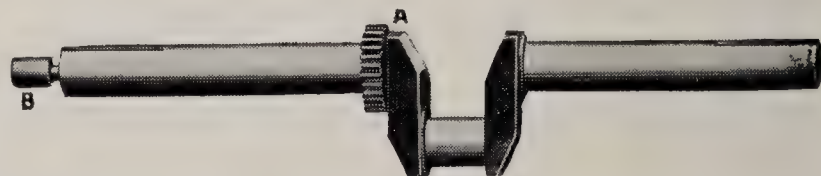
## McCormick-Deering Kerosene Engines



*Illust. 4—Enclosed crankcase. E—Removable cylinder.*

### Crankshaft

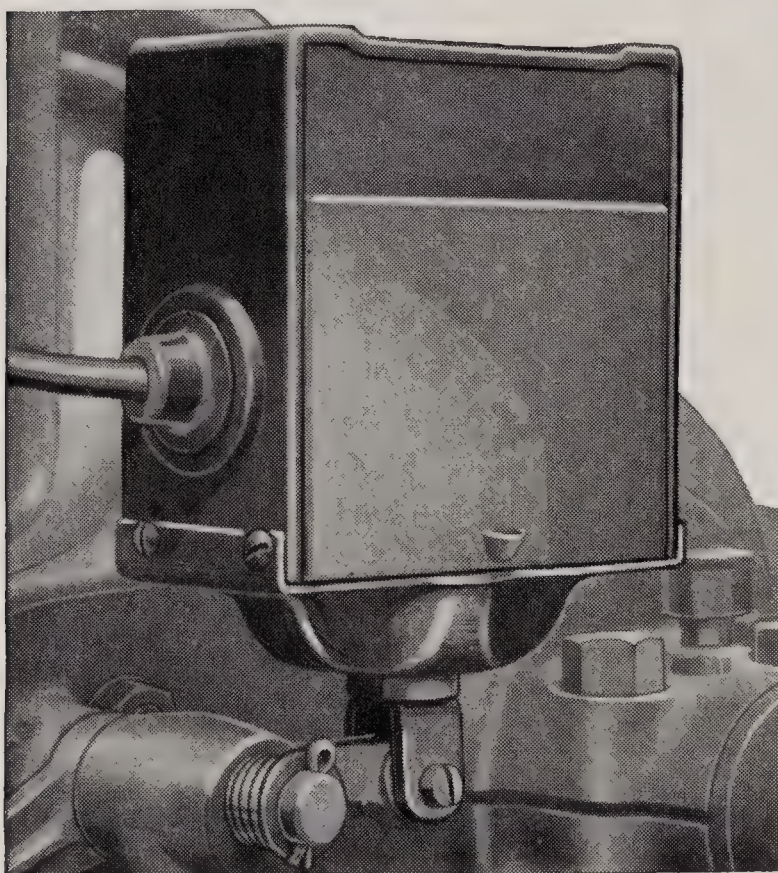
The heavy crankshaft is turned out of drop-forged steel. It is amply large to give the very best of service.



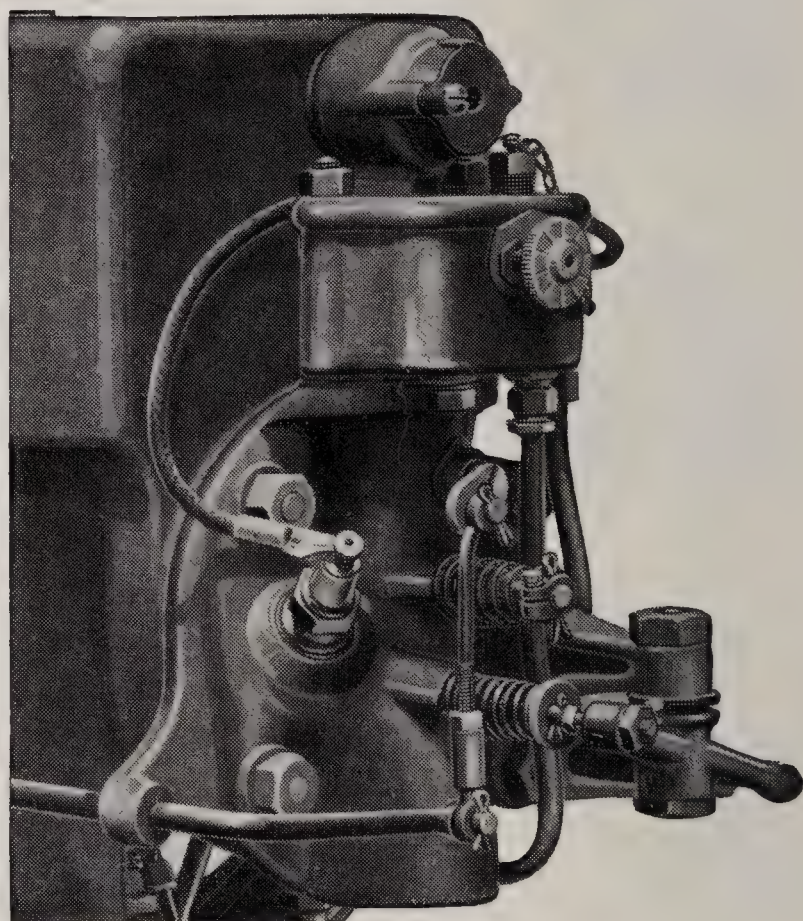
*Illust. 5—Crankshaft. B—Hard oiler which supplies oil for the crank pin bearing.*

### Removable Cylinder

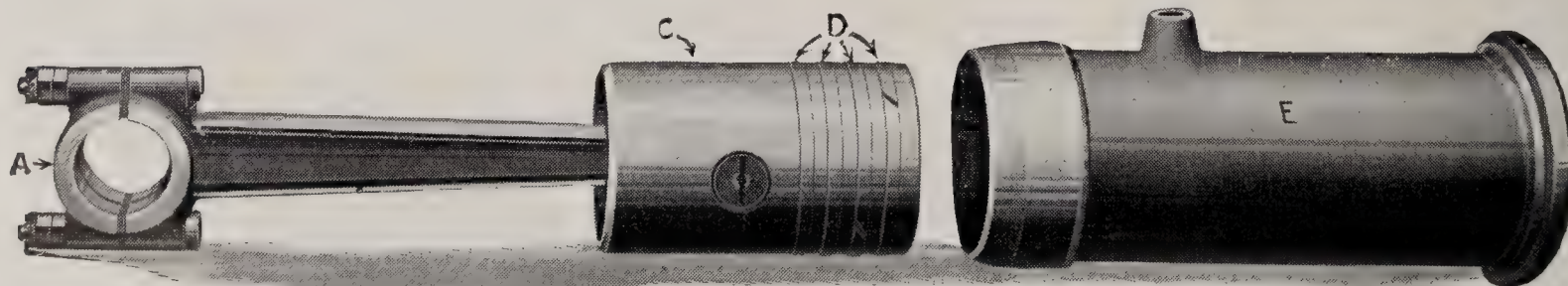
The McCormick-Deering engines are provided with removable cylinders. The piston works in this cylinder the same as it does in any cylinder. The advantage of using a removable cylinder is that if the cylinder becomes scored a new one may be put in and the engine is practically as good as new. The replacing of a cylinder can be done at small expense.



*Illust. 6—This high-tension magneto is absolutely dependable and considered the best for small farm engines. No matter how slowly the engine is turned over, this magneto gives a hot, fat spark. No revolving parts. The electric current is generated by a slight up-and-down movement.*



*Illust. 7—The simple, sturdy, efficient mixer used on the 1½ H.P. McCormick-Deering Engines. Easily and accurately adjusted for economical operation. The 3, 6 and 10 h.p. operate on kerosene, distillate, or gasoline; the 1½ h.p. on gasoline.*

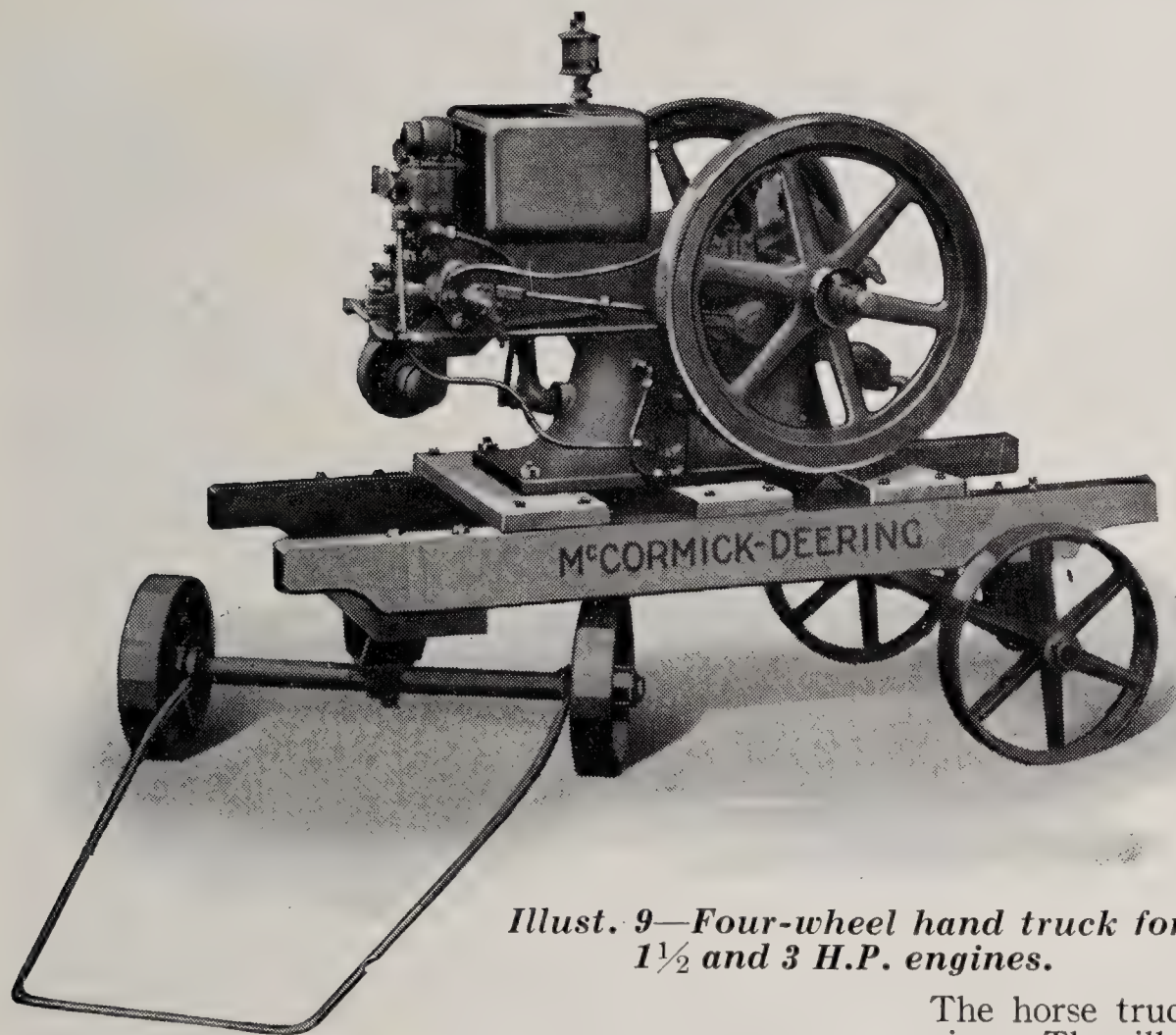


*Illust. 8—A. Connecting-rod. C. Piston. E, Removable cylinder. D. Four piston rings.*





## Equipment for McCormick-Deering Engines



*Illust. 9—Four-wheel hand truck for 1½ and 3 H.P. engines.*

### Hand Trucks

The 2-wheel or the 4-wheel hand truck and a McCormick - Deering engine make a most convenient outfit. With the hand truck the engine can be quickly and easily moved from one job to another. These hand trucks fit the 1½ and 3 H.P. sizes. They are bolted direct to the skids of the engine. The 4-wheel truck is so made that the front wheels turn under the skids, which makes it possible to turn the engine in a small space.

### Extra Plain Pulleys

Diam. Inches	1½ H.P.	3 H.P.	Diam. Inches	1½ H.P.	3 H.P.
	Face, Inches	Face, Inches		Face, Inches	Face, Inches
3	5½	.....	7	5½	5½
4	5½	5½	8	5½	5½
5	5½	5½	10	.....	5½
6	5½	5½			

### Extra Plain Pulleys

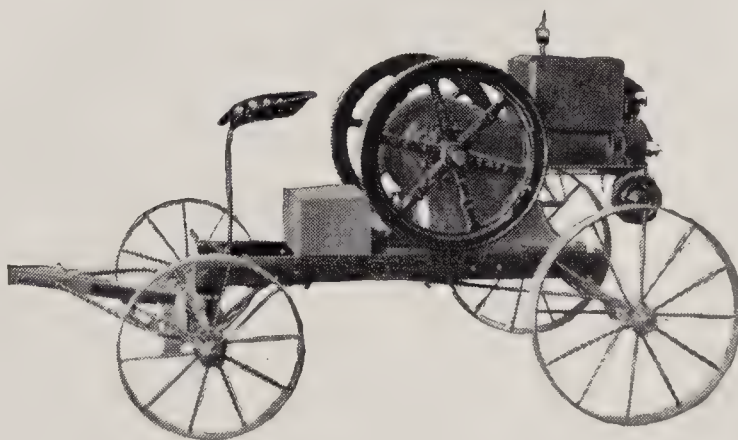
Diam. Inches	6 H.P.	10 H.P.	Diam. Inches	6 H.P.	10 H.P.
	Face, Inches	Face, Inches		Face, Inches	Face, Inches
6	7¼	7¼	20	10¼	10¼
8	12	12	22	10¼	10¼
10	12¼	12¼	24	9½	9½
12	12¼	12¼	26	9½	9½
14	12¼	12¼	28	9½	9½
16	12¼	12¼	30	9½	9½
18	10¼	10¼	.....	.....	.....

### Extra Friction Clutch Pulleys

Diameter Inches	3 H.P. Face, Inches	Diam- eter, Inches	6 H.P. Face, Inches	10 H.P. Face, Inches	Diam- eter, Inches	6 H.P. Face, Inches	10 H.P. Face, Inches
10	4½	12	6¼	.....	24	6½	6½
12	4½	14	6½	6½	26	6½	6½
.....	.....	16	6½	6½	28	6½	6½
.....	.....	18	6½	6½	30	6½	6½
.....	.....	20	6½	6½	.....	.....	.....
.....	.....	22	6½	6½	.....	.....	.....

### Horse Truck

The horse truck is made for the 6 or 10 H.P. engine. The sills of the truck are of channel steel. Both the front and rear axle are made of steel. The steel wheels have staggered spokes. The truck is provided with driver's seat, tool box, and tongue for two horses. See extra equipment for brakes.



*Illust. 10—Four-wheel horse truck for 6 and 10 H.P. engine.*

### Specifications of Horse Truck

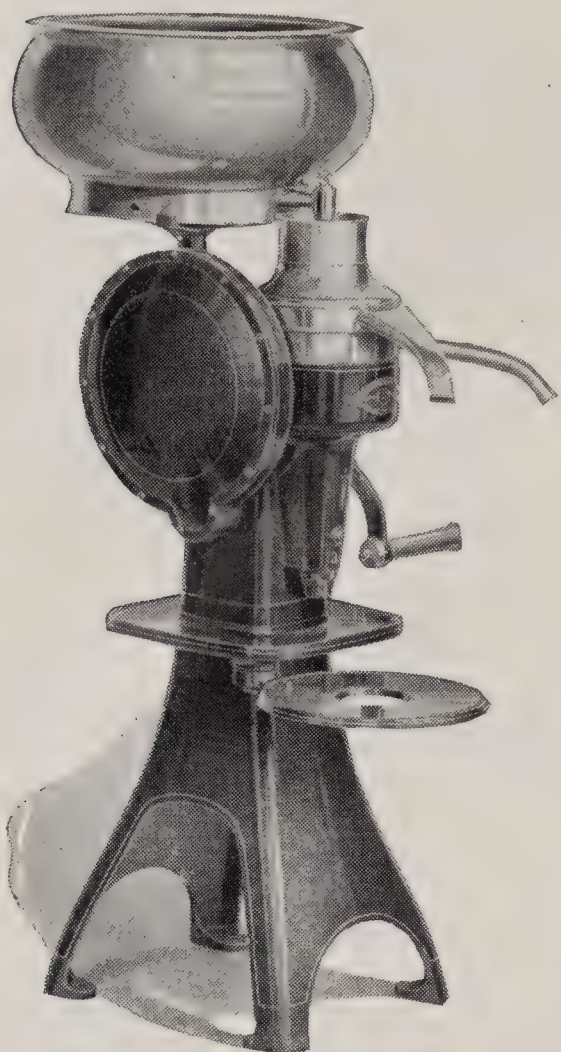
Wheel Base—59½ inches.  
Tread—44½ inches.  
Rear Wheels—30-inch Diameter and 3-inch Face.  
Front Wheels—24-inch Diameter and 3-inch Face.  
Road Clearance—Front Axle—8½ inches.  
Shipping Weight, about 416 pounds.

No. 53 double geared pump jack can be supplied for any of these engines. They have three strokes, 5, 7½ and 10 inches.





## McCormick-Deering Ball-Bearing Cream Separators



Six Sizes  
For One Cow or a Hundred

Four Ball Bearings  
in Each Size

Hand Operated  
Electric or  
Engine Driven



*Illust. 1—McCormick-Deering No. 1 Ball-Bearing Cream Separator.*

*Illust. 2—McCormick-Deering No. 2 Ball-Bearing Cream Separator.*

### New Product with an Old Name

Almost a quarter of a century ago the Harvester Company realized the importance of building a cream separator that would be a credit to the dairy industry and to its builder. The many thousands of McCormick-Deering cream separators that have been placed in service during these years is the best evidence of efficient and satisfactory year-in and year-out performance.

During all this period the Harvester Company has watched the rapid development of the dairy industry and improved its product to meet the ever-changing conditions.

The new McCormick-Deering ball-bearing cream separator is another step forward in this progress. This new machine, built in six sizes ranging from 350 to 1500 pounds per hour, is not merely a new model but a distinctly new type. This complete range of sizes provides just the right machine to exactly meet the requirements of the man with a few cows or the dairyman with a large herd. The 1200 and 1500-pound capacity machines are especially recommended for economical operation in creameries, milk plants, ice-cream factories, provincial institutions, etc.

### A Credit to a Great Industry

Every purchaser of a McCormick-Deering ball-bearing cream separator can have the greatest feeling of confidence in knowing that he has the best cream separator money can buy. He knows that his investment in a McCormick-Deering is backed by an organization that has been building farm-operating equipment for almost a century. The Harvester organization has ably assisted in the progress of agriculture by developing improved types of power machines, which are increasing yields and reducing costs, thus bringing about new and better methods of farming, and contributing substantially to the higher standards of farm life.

The McCormick-Deering ball-bearing cream separator is the Harvester Company's contribution to the dairy industry. A contribution that has materially assisted in placing the business of dairying on a profitable basis.

The increased demand for McCormick-Deering ball-bearing cream separators is convincing evidence of their popularity. A popularity rightfully deserved when every angle of cream separator manufacture and operating efficiency is taken into consideration.

### Specifications—McCormick-Deering Ball-Bearing Cream Separators

Size	Capacity	Height Inches	Floor Space Inches	Weight Pounds	Weight with Elec. Motor Pounds
No. 1	350 lbs.— 34 Imp. Gallons per Hour	44 $\frac{7}{8}$	20 x 27	130	174
No. 2	500 lbs.— 48 Imp. Gallons per Hour	44 $\frac{7}{8}$	20 x 27	132	176
No. 3	750 lbs.— 72 Imp. Gallons per Hour	48 $\frac{3}{8}$	22 x 29	166	210
No. 4	900 lbs.— 86 Imp. Gallons per Hour	48 $\frac{3}{8}$	22 x 29	167	211
No. 5	1200 lbs.—115 Imp. Gallons per Hour	50 $\frac{3}{4}$	24 x 31	211	259
No. 6	1500 lbs.—144 Imp. Gallons per Hour	50 $\frac{3}{4}$	24 x 31	214	262





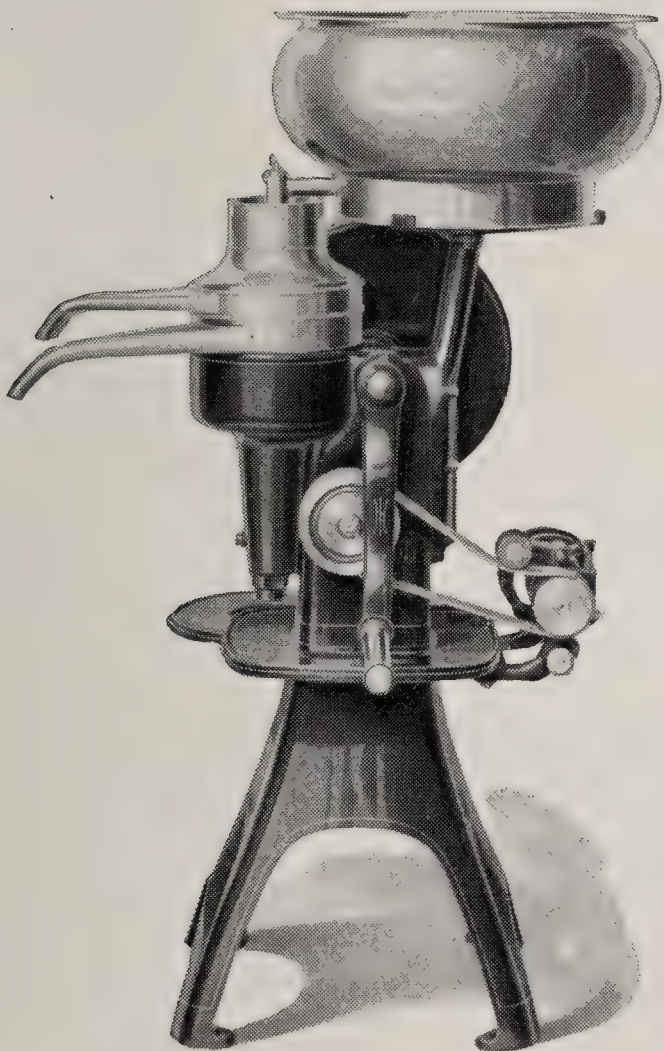
## McCormick-Deering Ball-Bearing Cream Separators

### Tested Under All Conditions

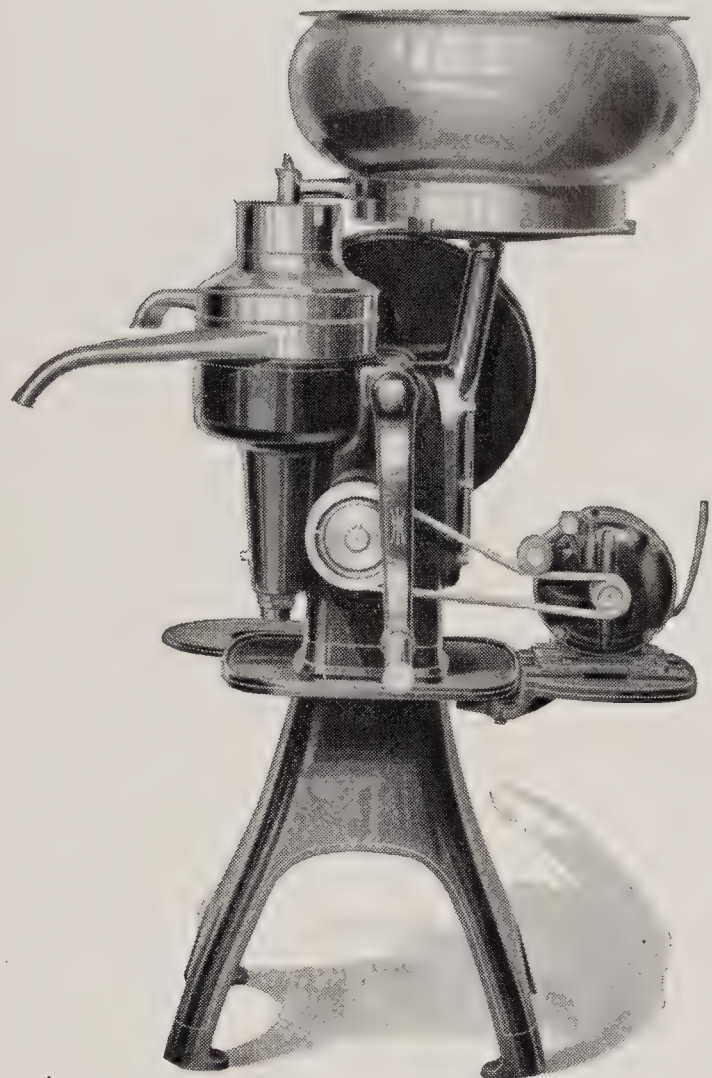
For several years every size of this new product has undergone rigid laboratory tests, and a great number of machines have been used under all conditions, in America, Australia, New Zealand, and South America. Supplementing this, the dairy divisions of many leading universities have had the new McCormick-Deering under constant observation. Daily tests have been made, and, as a result, these outstanding educational institutions have placed their stamp of approval on this machine. Their approval of the McCormick-Deering is your assurance that it is built right—to do the job of separating as you want it done.

A cream separator is purchased to increase profits. The cost of a good cream separator is an investment—not an expenditure. It is insurance against the loss of cream via the skim milk spout. A cream separator cheap in price, poorly constructed and inefficient in operation, may lose in a year's time a sufficient quantity of butter-fat that if sold to the creamery would pay for a new McCormick-Deering. It is just like putting money in a pocket with a hole in it.

The use of a McCormick-Deering ball-bearing cream separator is a wise business investment because it stops losses and increases farm profits with every turn of the handle.



*Illust. 3 — McCormick-Deering No. 3 Ball-Bearing Cream Separator equipped with engine drive, which is extra.*



*Illust. 4 — McCormick-Deering No. 4 Ball-Bearing Cream Separator equipped with electric motor, which is extra.*

### Machines for Large Producers

Farmers with large herds, creameries, ice-cream factories, milk plants, and various provincial and county institutions where a large quantity of milk is handled daily, will be interested in the large-capacity No. 5 and No. 6 McCormick-Deering ball-bearing cream separators.

With these 1,200 and 1,500-pound machines, the same as in the smaller sizes, it is possible to efficiently recover the butter-fat from milk or separate cream within a wide variation of temperatures. This feature is of great importance, especially where milk is handled on a large scale, as it is not always possible or advisable to maintain a milk temperature of high degree without extra labor and the additional exposure of milk and cream.

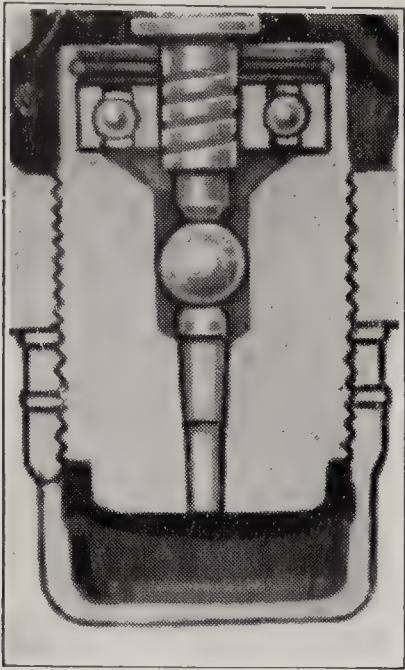
With the McCormick-Deering, milk may be skimmed or cream reskimmed at any reasonable temperature with absolute assurance of maximum butter-fat recovery. It also becomes necessary at times to skim pasteurized milk or to reskim cream. This the McCormick-Deering will do to the utmost satisfaction.

The quality of cream and the regulating of cream density is of unusual importance. The bowl design, with its unrestricted cream passages, large slime space and cream discharge, assures at all times a regular and constant cream density. The regulation of density, which controls the flow of skim milk, assures a wider range of density and a less sensitive adjustment because of a greater volume of skim milk to regulate as compared to cream.





## McCormick-Deering Ball-Bearing Cream Separators



*Illust. 5—A large hard steel ball similar to those used in the ball bearings themselves has been placed between the steel points of the spindle and the lower bearing. No more perfect bearing could be devised for the elimination of friction and wear or the maintenance of long life.*

### Four Ball Bearings

The McCormick-Deering with four ball bearings is without question one of the greatest achievements in recent years in cream separator construction. Other McCormick-Deering features are equally important, but its light-running qualities due to ball bearings have solved the dairyman's problem of separating more milk without loss of butter-fat in less time, at less cost and with less labor.

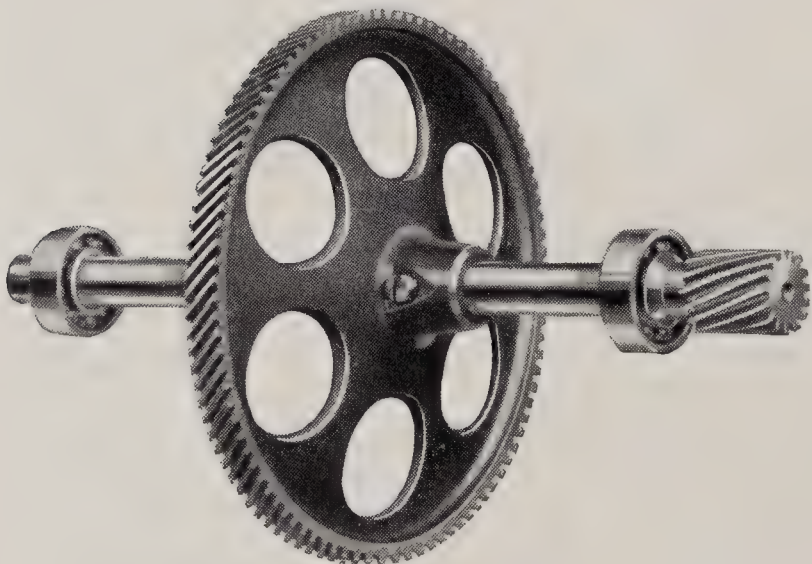
### Separating an Easy Task

The new McCormick-Deering ball-bearing cream separator is not only a step forward in providing easy turning so long desired, but it also provides a quiet, smooth-running machine that a woman or even a child can operate with ease. Experienced persons know that a plain-bearing cream separator with its high speed will have a much shorter life and be less efficient in operation than a ball-bearing cream separator of the McCormick-Deering type.

Tests made by various institutions show that the friction in plain bearings, under the best conditions, is almost four times as great as in ball bearings.

### New McCormick-Deering Invites Comparison

A comparison of any plain-bearing cream separator with a McCormick-Deering will convince you of the superiority of ball-bearing construction over that of the plain-bearing type. A new McCormick-Deering on the average farm will mean greater profits from the cows and years of dependable and satisfactory service from the machine.



*Illust. 6 — Next to the spindle the high speed point of any cream separator is the pinion shaft, upon which the phosphor bronze spindle driving gear revolves. At each end of the pinion shaft, mounted in the frame, there is the same high quality ball bearings as surrounds the spindle. This is an exclusive feature not to be found on any other cream separator.*



*Illust. 7—The spindle in the new McCormick-Deering is shorter and heavier than in most separators. It is surrounded at the top and bottom by ball bearings.*



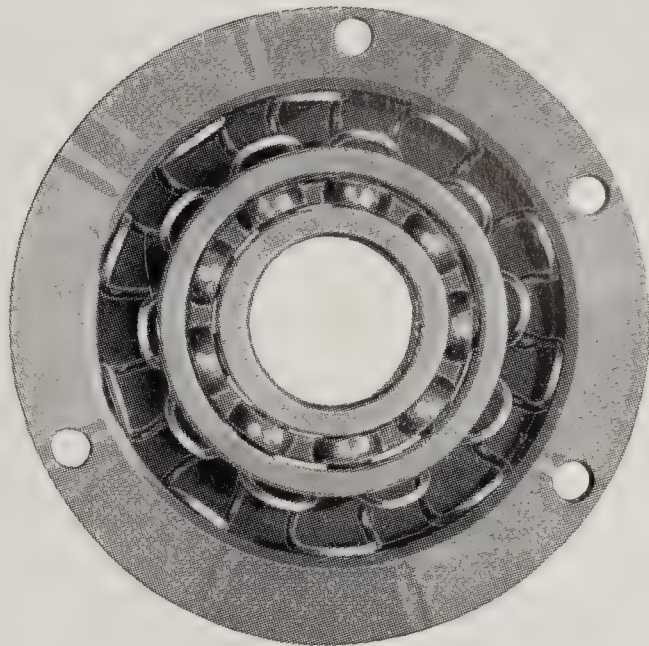


## McCormick-Deering Ball-Bearing Cream Separators

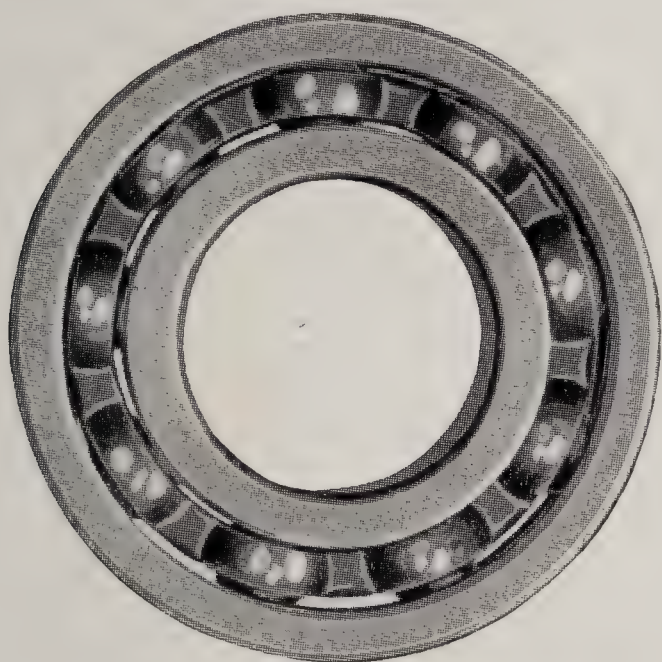
### Neck Bearing Spring Assembly

The weakest link in the strongest chain measures the strength of the chain, just as the neck bearing spring that surrounds and supports the spindle measures the operating efficiency of the cream separator.

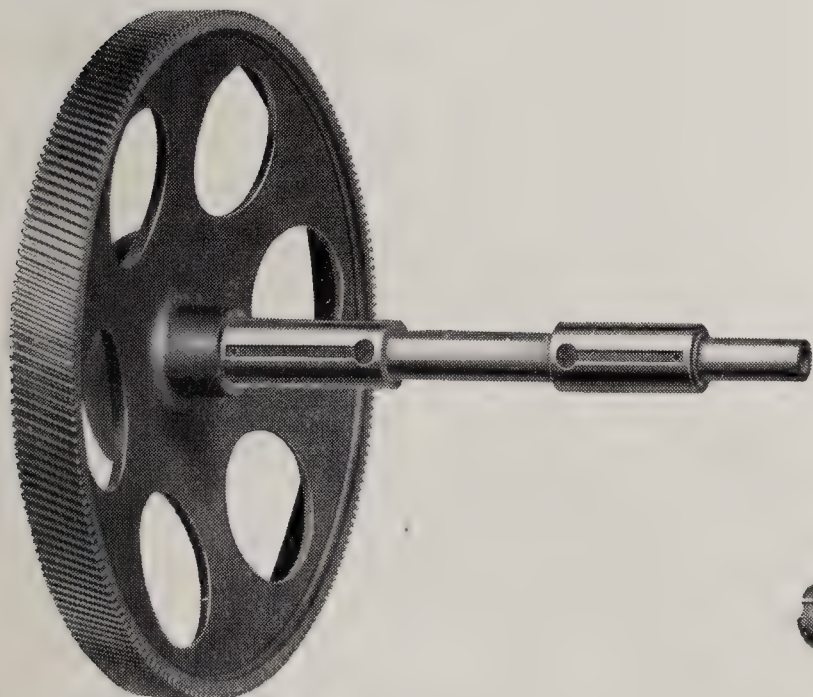
The neck bearing spring assembly on the McCormick-Deering shown in illustration is simple, efficient, and perfectly lubricated. In order that the proper spring tension may be maintained at all times, the spring and bearing are enclosed in a steel container. With each turn of the crank, oil is sprayed into the container on top and through the spring and ball bearing, thus assuring a complete drenching of oil. The lubrication of the spring and bearing keeps them in perfect condition. With a fixed yet flexible assembly of the spring and bearing, long life and an easy, quiet-running machine is assured.



*Illust. 8—Upper neck bearing spring assembly enclosed in steel container.*



*Illust. 9—Close-up view of improved ball bearing used in neck bearing spring assembly.*



*Illust. 10—Large spiral gear crankshaft and long, heavy phosphor bronze bearings.*

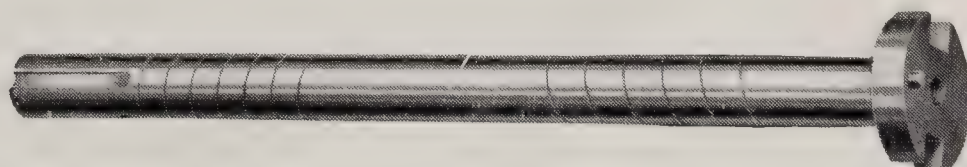
### Improved Ball Bearings

One of the outstanding improvements in the design of the ball bearings used in the new McCormick-Deering cream separators is the addition of a greater number of balls. This gives greater strength and longer life under all conditions of service. The ball race that separates the balls is made of special alloy manganese bronze which is particularly adapted for this purpose because of its toughness and non-friction qualities.

The ball pockets are deep, which allow perfect lubrication around the balls. The balls are made of high carbon alloy steel and guaranteed for sphericity and uniformity of size.

### Phosphor Bronze Crankshaft Bearings

While the McCormick-Deering is a slow-speed machine and perfectly lubricated in every respect, yet Harvester engineers have gone still a step further by incorporating heavy removable phosphor bronze bearings on the crankshaft. These bearings are made of the finest materials obtainable and reduce friction and wear to a minimum. These bearings are adjustable and enable a closer and more accurate alignment of operating parts and are far superior to any other type of bearing used for this purpose.



*Illust. 11—McCormick-Deering cream separator crankshaft with oil grooves and clutch hub.*





## McCormick-Deering Ball-Bearing Cream Separators

### Scientifically Designed Bowl

In designing McCormick-Deering cream separator bowls, Harvester engineers have incorporated the latest scientific principles as effected by centrifugal force when applied to the separation of butter-fat from milk.

There are many important factors involved in correct designing and building of an efficient cream separator bowl, namely: milk temperatures, butter-fat contents of milk skimmed, regulation of cream density, capacity, height, width, weight, speed, angle and spacing of discs, delivery of milk to bowl and discs, cream and skimmilk outlets.

A bowl to give satisfactory service must perform efficiently under varying conditions. It must skim milk from cows long in lactation. It must maintain a uniform cream density under a wide range of temperatures, especially where winter dairying is practiced. It must have ample slime space for long continuous runs without interfering with skimming efficiency. All these features have been incorporated in the McCormick-Deering to provide a cream separator that will skim closer, last longer, operate easier, and provide a profitable daily cash return.

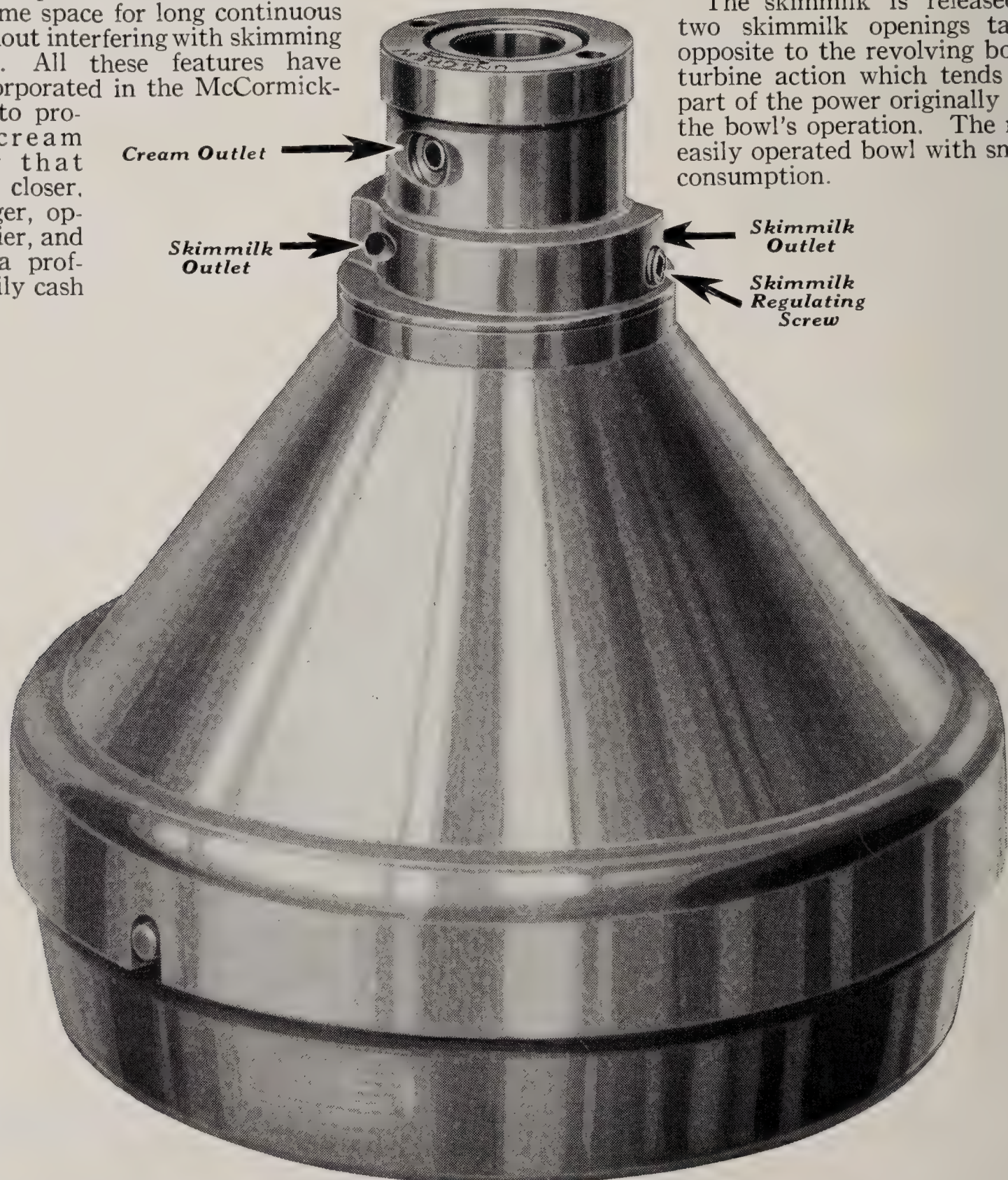
### Cream Regulated by Skimmilk

In the design of the new McCormick-Deering cream separator bowl the density of the cream is regulated by controlling the discharge of the skimmilk. This construction is far superior and more efficient than the cream screw-type of separator bowls.

With the cream screw-type of bowl the regulation takes place at a point directly in the path of the cream discharge. In the McCormick-Deering the skimmilk regulation of the cream density is scientifically applied at the point of discharge of the skimmilk and not in the path of the cream. This adjustment for cream density is less sensitive, more positive, and results in the delivery of a more uniform cream in a better condition for churning.

### Two Skimmilk Openings

The skimmilk is released through two skimmilk openings tangentially opposite to the revolving bowl with a turbine action which tends to return part of the power originally applied to the bowl's operation. The result—an easily operated bowl with small power consumption.

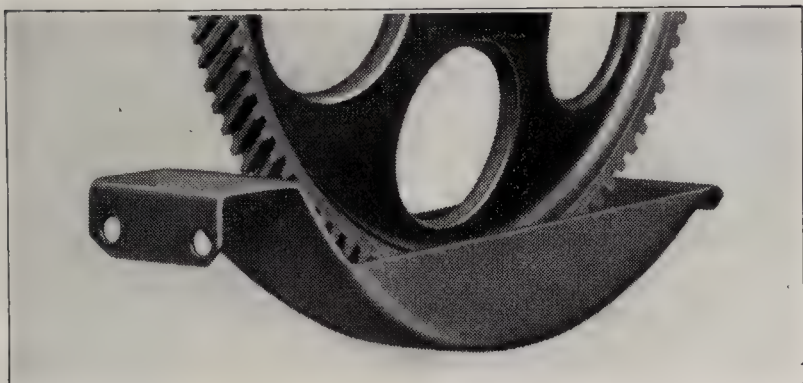


*Illust. 12—McCormick-Deering cream separator bowl showing the exact location of the cream and skimmilk outlets and the skimmilk regulating screw.*





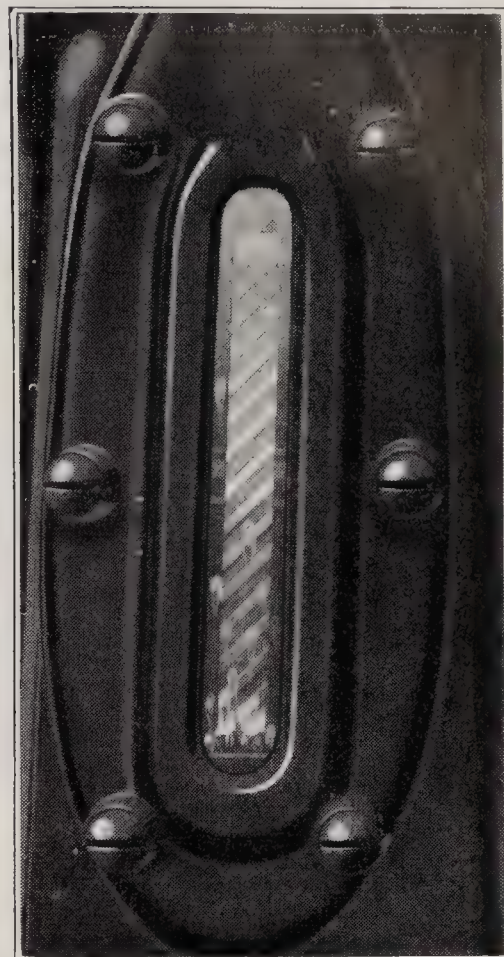
## McCormick-Deering Ball-Bearing Cream Separators



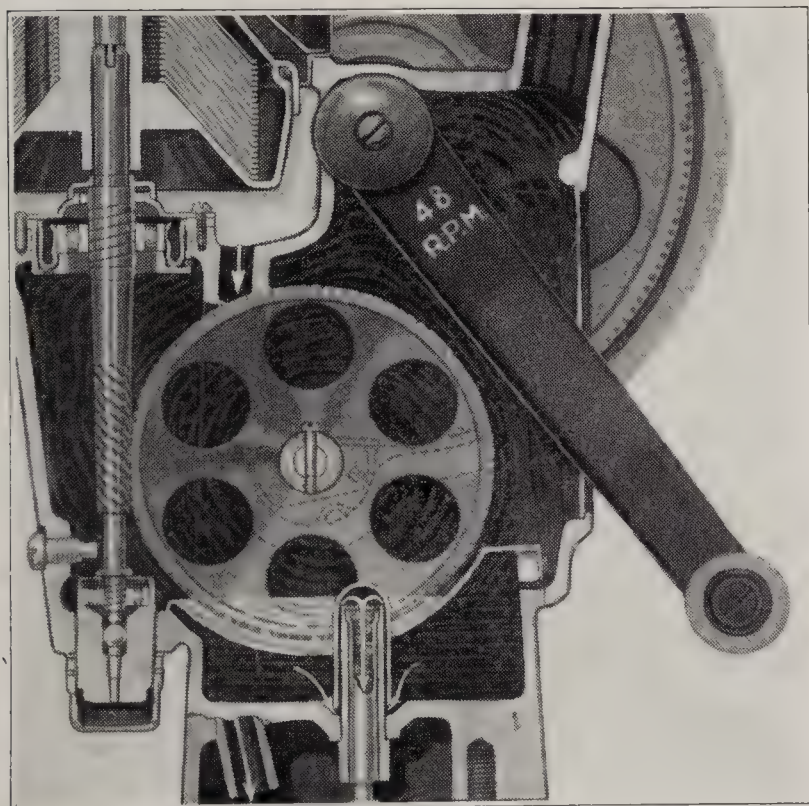
*Illust. 13—An exclusive McCormick-Deering feature is a metal trough in which the spindle gear revolves. This little trough insures that only clean, fresh oil is sprayed to the gearing and bearings. The worn or dirty oil in the bottom of the reservoir is not disturbed.*



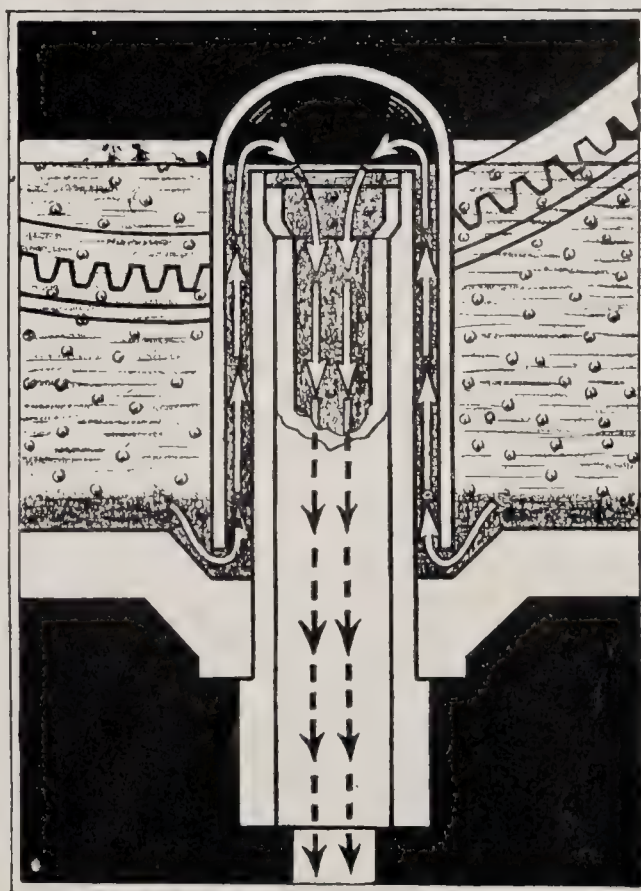
*Illust. 14—This is the metal oil trough which is so situated under the spindle gear that oil is sprayed to every moving part of the interior of the machine. The hole in the bottom of the trough admits only the clean, pure oil and prevents any dirty or worn oil which might be lying at the bottom of the case from being thrown into the bearings. This is an exclusive feature on McCormick-Deering ball-bearing cream separators.*



*Illust. 16—A spray of oil against the glass panel in the lower part of the supply can bracket while the McCormick-Deering is in operation tells definitely that every running part in the machine is being perfectly oiled.*



*Illust. 15—When the separator is started the spindle gear throws a fine spray of oil to every moving part. The cross sectional view above illustrates the reason why these separators run so easily and quietly.*

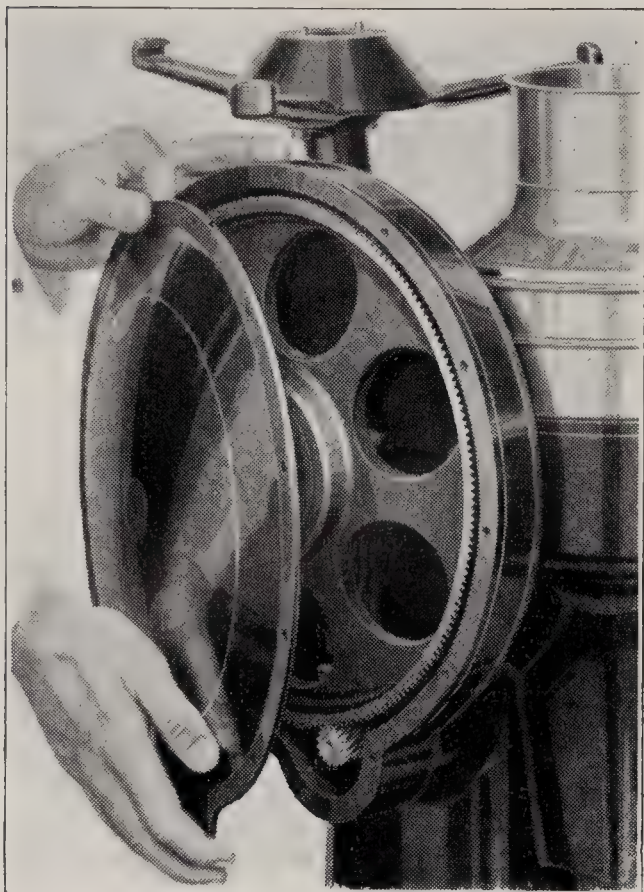


*Illust. 17—Sectional view of oil overflow tube. The arrows show how the worn, dirty oil is forced out of the machine and is discharged from the bottom of the reservoir between the overflow tube and cap to the drip cup underneath. An exclusive feature.*

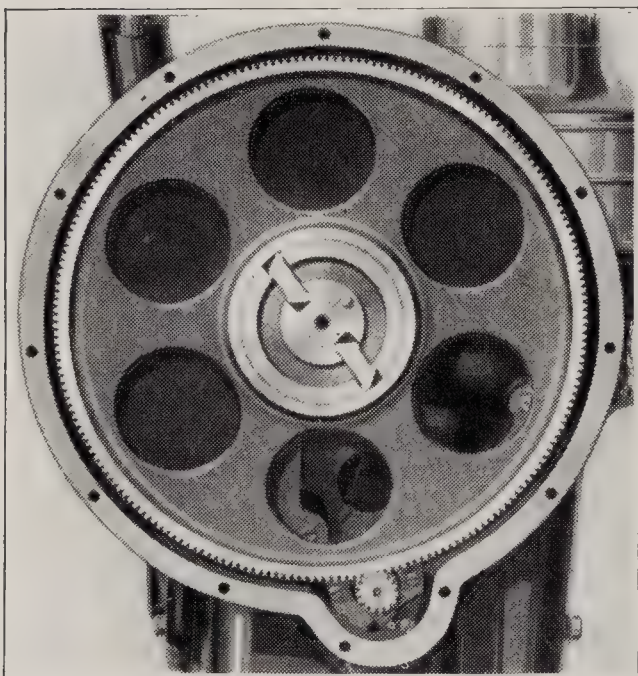




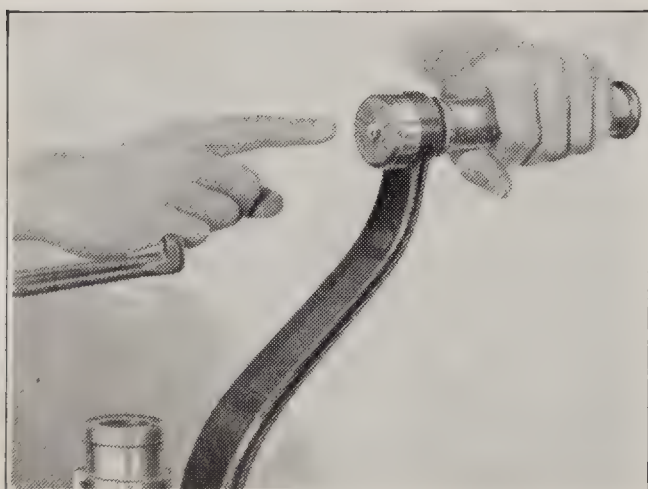
## McCormick-Deering Ball-Bearing Cream Separators



*Illust. 18—Main Driving Gear Enclosed.*



*Illust. 19—Friction Clutch.*



*Illust. 20—Simple Speed Indicator.*

### Main Driving Gear Completely Enclosed

The main driving gear in the McCormick-Deering is completely enclosed, thus protecting it from dirt and dust. Children's hair, clothing, and hands have been injured by exposed gears, but in the McCormick-Deering every precaution has been taken to make it a safe machine in the home. Through an opening on the inside of frame the main driving gear receives at all times a constant bath of oil. This feature prevents wear and assures a quiet, easy-turning machine.

### Friction Clutch

The crank clutch on the McCormick-Deering is located in the center of the main driving gear. This clutch, while simple in construction, is reliable in operation. It takes hold instantly and releases quickly at any point in the crank circuit. The McCormick-Deering friction clutch enables the operator to use either an electric motor or power-drive attachment without removing the crank, and the crank does not swing while the machine is in operation.

### Bowl Drained at Machine

You do not have to hold the bowl to drain it. The design of the McCormick-Deering makes draining the bowl an easy operation. An opening in the pail shelf holds the inverted bowl while draining into a pail underneath the shelf on the floor. Draining the bowl in this way prevents freezing of the contents in winter, contamination in summer, or rusting as the result of neglect in emptying the bowl.

### Simple Speed Indicator

The speed indicator (bell type) on the McCormick-Deering is located at the end of the crank. It is simple in construction and accurate in operation. When the crank has been brought up to speed, the bell will cease to ring and will remain silent as long as the speed is maintained.



*Illust. 21—Bowl Drained at Machine.*





## McCormick-Deering Ball-Bearing Cream Separators

### Efficient Engine Drive

To meet the demand for a simple, practical engine drive, this power attachment was designed and is being used on McCormick-Deering ball-bearing cream separators. As shown in Illust. 23, it may be attached quickly and easily to any hand-operated McCormick-Deering cream separator now in use, or if desired, it can be supplied with a new machine.

With this efficient power attachment, the cream separator may be operated either by the engine, electric motor or line shaft. A direct connection is made without requiring a speed-reducing gear and the engine drives the separator at a constantly uniform speed.

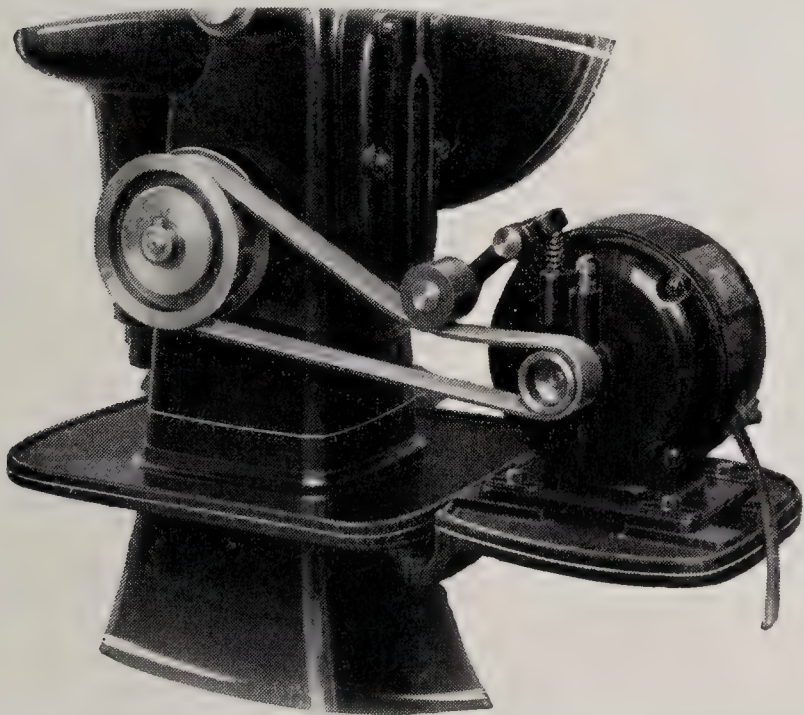
### Tight and Loose Pulley

The McCormick-Deering power-drive attachment is of the latest design and positive in operation. It is equipped with a tight and loose pulley for disconnecting the power to the separator without stopping the line shaft. The mere sliding of the belt on the power drive by shifting the lever releases the power while the bowl is running down. This attachment does not interfere with hand operation. The crank is not connected in any way with the power drive and it does not swing when the separator is in operation.

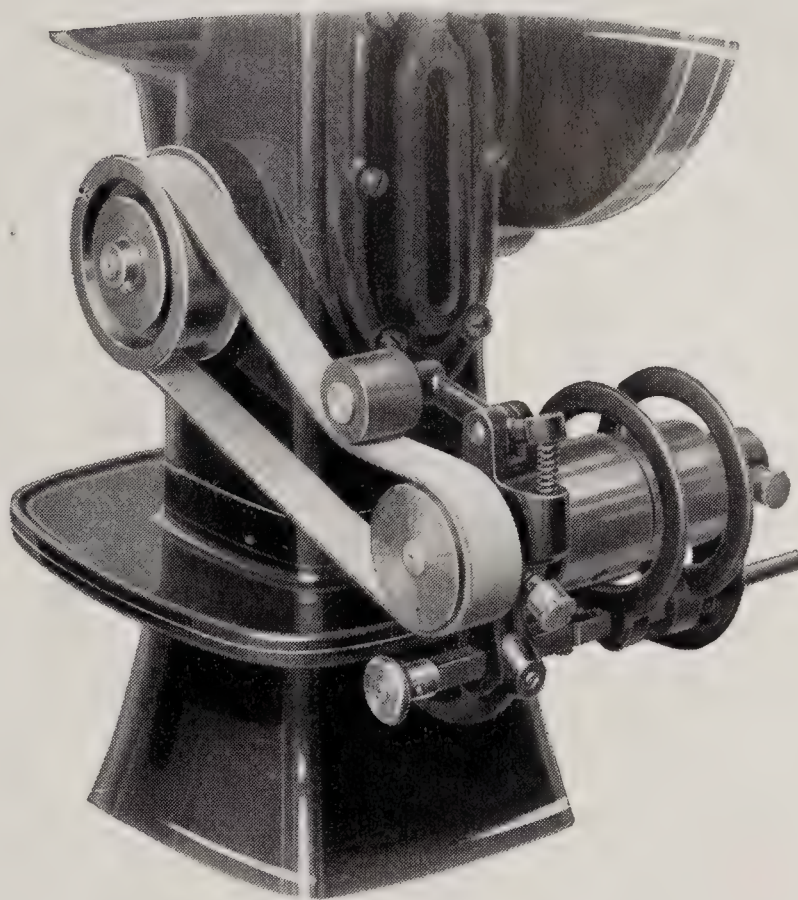
The McCormick-Deering with this power-drive attachment makes an ideal unit for saving time and labor.

### Extended Pinion Shaft

Hand-operated McCormick-Deering ball-bearing separators can be changed easily to operate with electric motor or power-drive attachment. This is accomplished by an extended pinion shaft so constructed that the operating pulley can be attached quickly without replacing the pinion shaft or bearings which are now in the machine.



*Illust. 22—McCormick - Deering cream separator electric motor. The motor drives the separator by means of a leather belt running over two pulleys, one on the motor and one on the clutch on the extended pinion shaft of the separator. The motor shelf contains slots which permit a one-inch adjustment on the motor for taking up tension on the belt.*



*Illust. 23—Close-up view of McCormick-Deering power drive attachment assembled on the machine.*

### Special Electric Motor

The motor, especially built for the McCormick-Deering, is completely enclosed and protected from milk, water and dirt. This efficient, low-cost power unit is known as the "repulsion start type" of motor, and is the only motor recommended for use with McCormick-Deering ball-bearing cream separators. This unit is actually two motors combined with one.

As the bowl increases its speed less power is required and the motor automatically changes over to another type by the automatic release of a centrifugal clutch. This design gives maximum power with a low starting amperage which prevents the undesirable dimming of lights when starting the motor or during its operation.

### Supplied for All Currents

The McCormick-Deering can be supplied for all currents from 32 to 220 volts either direct or alternating, or 25, 40 and 60 cycle. This includes current supplied from farm lighting plants, inter-urban railways, and power lines. Motor equipment for the McCormick-Deering may be ordered for any size machine now in use.

### Motor Easily Installed on Machine

It is a simple matter to equip any hand-operated McCormick-Deering cream separator with electric motor. On every hand-operated machine the drip shelf is drilled and threaded, which permits a quick and easy installation of the motor shelf without making adjustments or dismantling the machine in any way.





## Vessot Feed Grinders

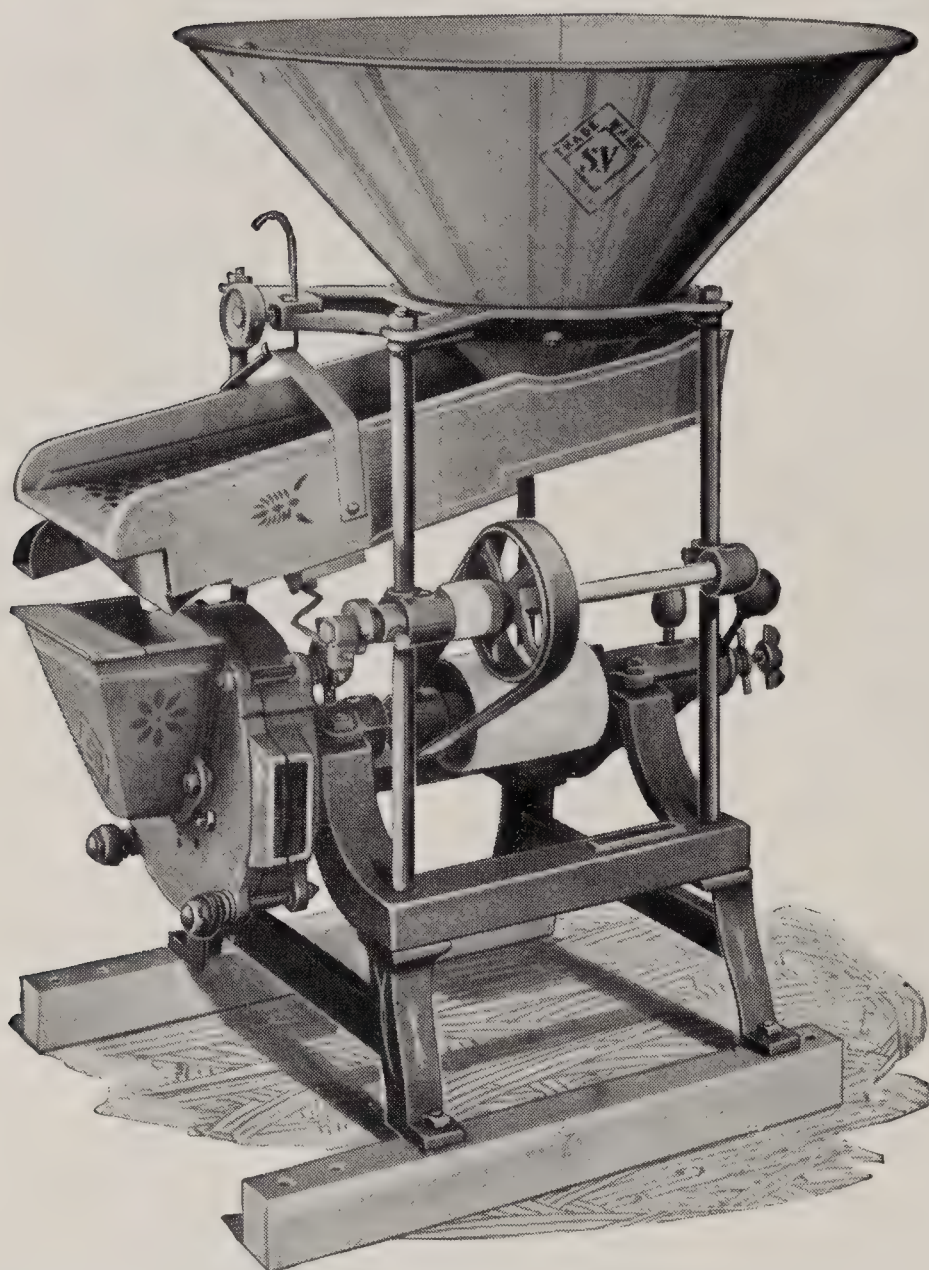
### Plain or Ball Bearings

Any size of Vessot feed grinder may be purchased either with plain or ball bearings as desired. Ball bearings add slightly to the cost, but the reduction in power required and the increased life of the machine makes them well worth all they cost.

Every Vessot is put together like a watch by careful workmen who have spent a lifetime making the best machine they could possibly turn out.

### Vessot Grinds Anything

The average mill or feed grinder will do a fair job of grinding corn, barley and wheat, but cannot be used successfully for flax and the smaller seeds. The Vessot grinder is not confined to grinding coarse grain, but can be set to handle the smallest seeds, such as flax, alfalfa, millet, clover and mustard. Many farmers use screenings for feed, but unless these screenings are ground, the mustard and wild oats are almost sure to pass through the animals and reseed the farm to noxious weeds. By running the screenings through the Vessot, the ration is at once made more palatable and digestible and the germ of life in the weed seeds is destroyed. Bones and oyster shell when thoroughly dried and broken can be ground for poultry.



*Illust. 1—Vessot 6½-inch Feed Grinder. Similar in construction to 8-inch and 9-inch grinders.*

### Specifications—Vessot Feed Grinders

Size of Grinder Plate	Dimensions			Speed Rev. per Min.	Pulley			Approximate Capacity		Power	Approx. Weight	Free with Machine
	Lth.	Wth.	Ht.		Face	Dia.	Kind	Per Hr. Fine Meal	Per Hr. Coarse Meal			
6½"	36"	30"	39"	2000	6"	4½"	Iron	Bushels 5 to 10	Bushels 7 to 15	H.P. 3 to 6	180 lbs.	1 Pair Plates.
8"	36"	30"	39"	2000	6"	4½"	Iron	7 to 13	10 to 18	3 to 8	199 "	1 Pair Plates.
9"	36"	30"	39"	2200	6"	4½"	Iron	8 to 13	11 to 20	4 to 8	219 "	1 Pair Plates.
9¼"	42"	32"	42"	2500	6½"	5"	Fibre	10 to 18	14 to 30	5 to 12	291 "	1 Pair Plates.
10½"	42"	32"	42"	2500	6½"	5"	Fibre	12 to 20	16 to 35	6 to 20	314 "	1 Pair Plates.
11"B	52"	42"	48"	2800	7½"	6"	Fibre	16 to 28	24 to 40	8 to 22	553 "	1 Pair Plates. 1 Sharpener and 1 Revolving Head Puller.
11"	54"	42"	48"	3500	7½"	6"	Fibre	20 to 35	30 to 60	12 to 30	665 "	1 Pair Plates. 1 Sharpener.
13"	60"	48"	54"	3500	9"	7"	Fibre	30 to 60	50 to 100	18 to 50	934 "	1 Revolving Head Puller. 1 Babbiting Outfit.
15"	66"	53"	60"	3500	10"	7½"	Fibre	60 to 80	80 to 130	30 to 65	1172 "	

NOTE.—The above capacities are approximate, as the speed of the mill, power, condition of the grain to be ground and the degree of fineness to which it is ground influence the capacities to a considerable extent. Be sure the pulleys on the grinder and engine are dry and in good shape to give the required speed. Use as wide a belt as possible. It is better to use a wide slack belt than a narrow tight one. Mill should not be run above specified speed.





## Vessot Feed Grinder



### Convenient Elevator

Bagging elevator can be secured with all sizes of grinders. The bagger is well built, with a malleable elevator chain and steel scrapers. A trapdoor is provided at the bottom for relief in case the elevator chokes. Double bag holder permits filling without a particle of waste.

The countershaft which is provided to operate the bagging elevator also is equipped with an eccentric for operating the shaker which is governed by the speed. This shaft runs in two long bearings which are lined up to keep it running true. Countershaft can be interchanged to either side of the machine, which is a feature not common on other grinders.

*Illust. 2—Vessot 11-inch Grinder which is heavier and stronger throughout. Similar to the 13-inch and 15-inch mills.*

### Bearings Always in Line

The base of the Vessot Grinder is made strong and solid to hold the bearings rigidly in line. This contributes to ease of operation and long life because the bearings cannot become twisted or wear rapidly. In any machine which turns at high speed, the frame that supports the bearings must be solid; therefore, great care has been taken to construct the base of the Vessot grinder solid enough to hold the mechanism in constant alignment. There are no ordinary cast legs to fall out or get broken.

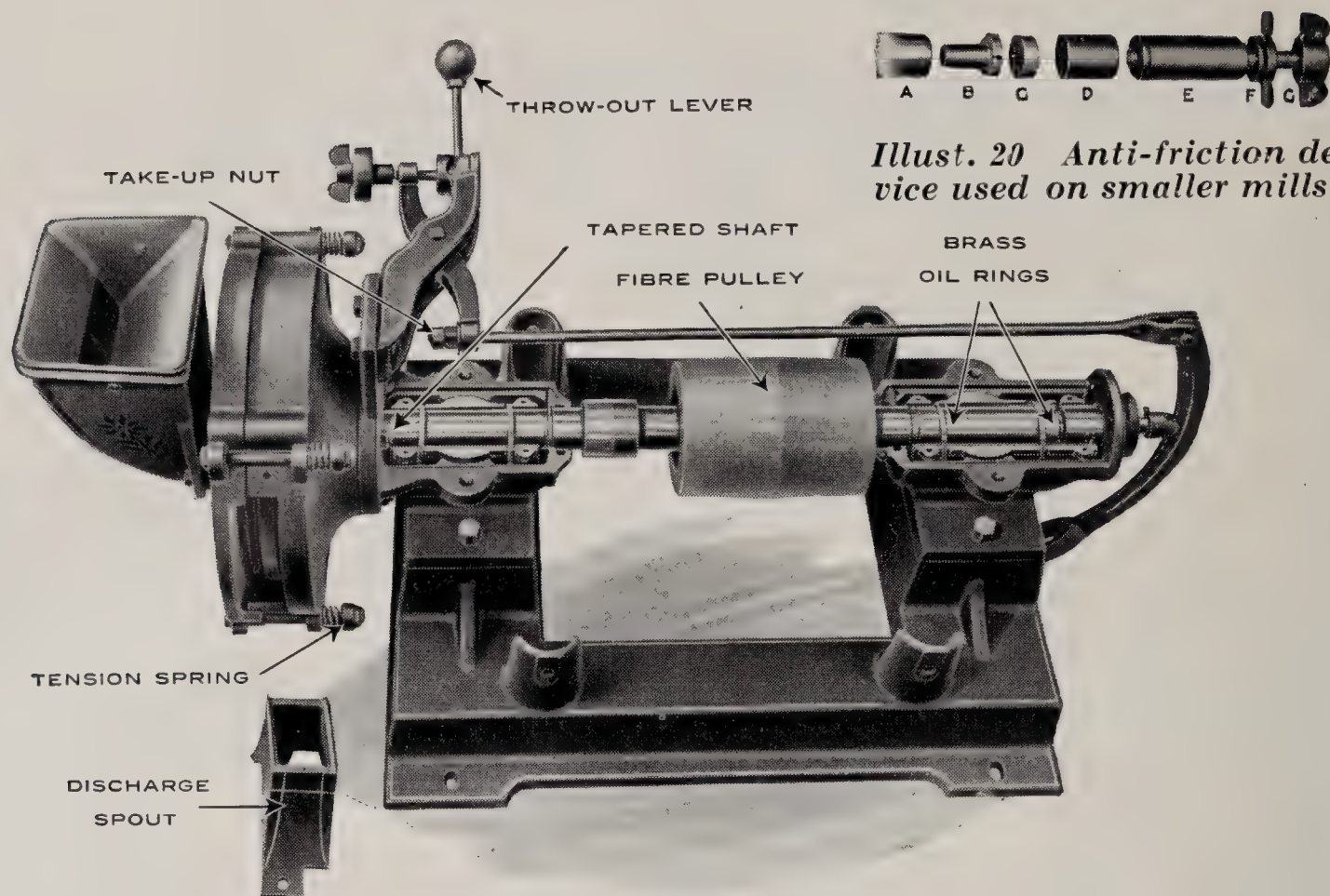


*Illust. 3—Bagging elevator can be supplied at extra cost for any size Vessot Grinder.*





## Vessot Feed Grinders



*Illust. 20 Anti-friction device used on smaller mills.*

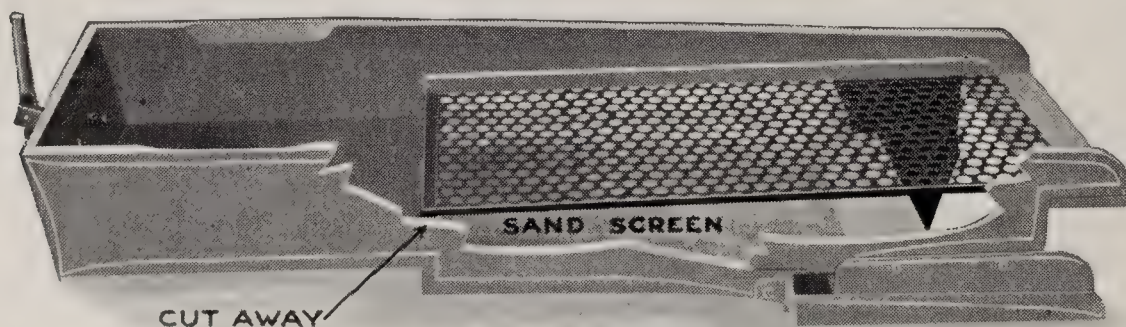
*Illust. 4—Base of heavy type grinders, holds main shaft and grinding mechanism rigidly in line.*

### Tapered Main Shaft

The main shaft is a marvel of careful machine work and is composed of high carbon steel of the greatest strength and elasticity. This shaft is machined with tapered ends so that the plates and pulleys can be placed on in such a way as to become almost a solid piece with the shaft. The pulley and shaft are balanced separately and again after being put together. There are no keys to cause weakening of the shaft and nothing to throw it out of balance.

### Thoroughly Oiled

The main shaft, A, is provided with an end thrust bearing that has proved its value under heavy work. A conical-shaped friction block, B, of tempered steel is placed in a recess at the end of the shaft. Next to this is a phosphor bronze block, C, and then another steel block, D, upon which the pressure screw, E, bears. These two latter blocks are bored at their centers to insure a constant flow of oil from the cups to the conical block.



*Illust. 5—A coarse sieve takes out the straw and large foreign substances, while a fine sand screen removes the sand and grit that otherwise would ruin the plates.*

### Self-Aligning Bearings

The bearing blocks in which the shaft turns are correct in principle because they have proved satisfactory in actual use covering many years. The two bearings on the main shaft are extra long, and on the heavier mills (11, 13 and 15-inch) a ball-and-socket construction makes the bearing absolutely self-aligning. It is impossible to get one of these bearings out of line in setting up the machine or replacing a bearing. The highest grade anti-friction babbitt metal is used in these bearing blocks in all sizes and is put in very thick to allow for taking up wear. Deep oil grooves are provided, both top and bottom, to insure a constant flow of oil to the rapidly moving shaft. Bearing boxes are practically dustproof.

### Efficient Sieves

The sieves are built with care and will take practically all trash out of the grain before it is delivered to the plates. The upper sieve is coarse and is designed to separate only the straw, grass, nails, wire and large foreign substances. Below this is a sand screen which separates the sand and dirt from the grain. This sand screen lengthens the life of the grinding plates by preventing the sand and grit from going through them and causing needless wear. It also improves the quality of the feed.





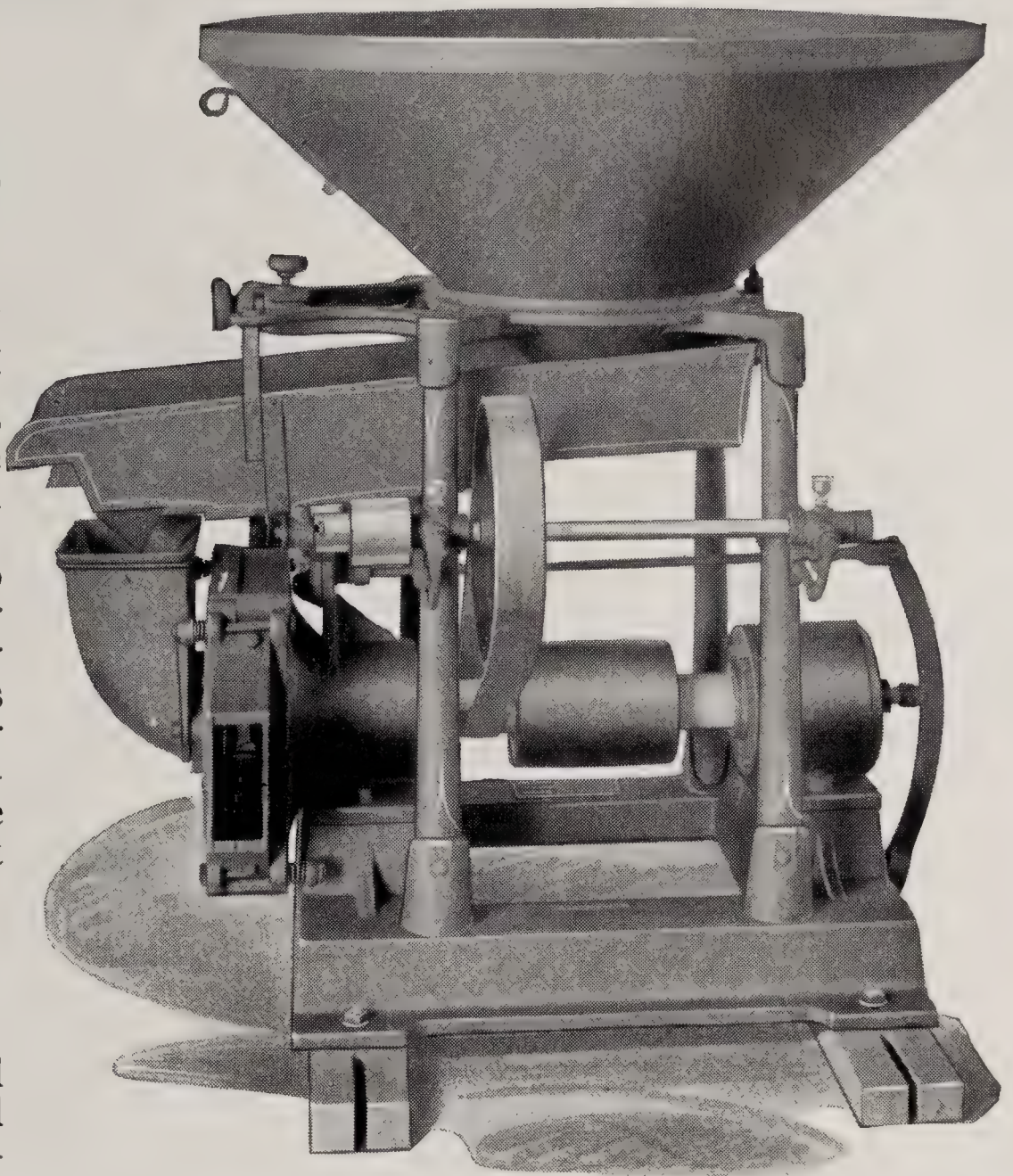
## Vessot Ball-Bearing Grinders

### Ball Bearings Optional

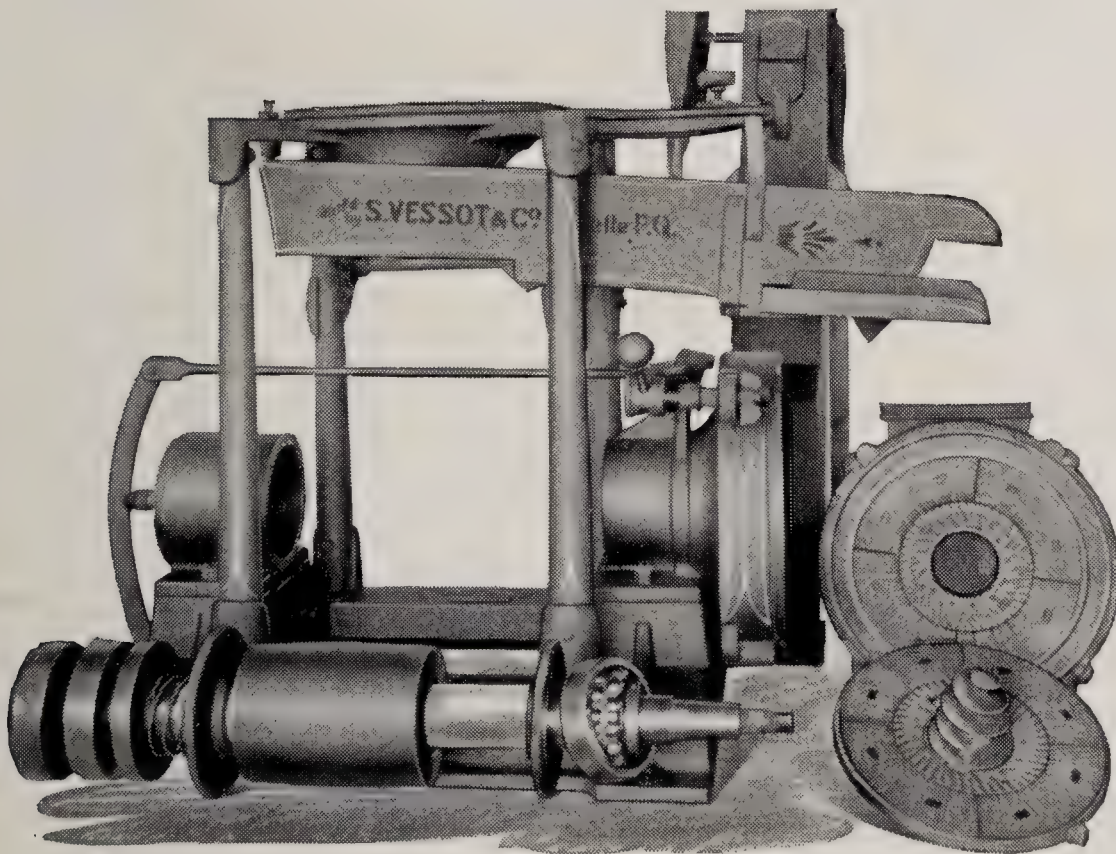
Vessot feed grinders are also made in ball-bearing models. Ball bearings on the main shaft of a feed grinder results in a higher-priced machine, but on the other hand its life is greatly lengthened and less power is necessary to operate. Thus the ball-bearing grinder is the most economical in the long run. The main shaft turns in two heavy duty ball bearings similar to those shown in the lower illustrations. These bearings are made by a prominent maker of high-grade automobile bearings, and with a reasonable amount of care should outlast the grinder itself.

### Best for Custom Work

Mill owners particularly will be interested in the wonderful opportunities the Vessot ball-bearing grinder offers for long,



*Illust. 6—View of the elevator side of the Vessot 15-inch ball-bearing grinder. This view is also typical of the elevator sides of the 11 and 13-inch grinders.*



*Illust. 7 — Vessot ball-bearing grinder partially un-assembled. The heavy, solid construction of the frame and working parts assures an extra margin of strength where needed.*

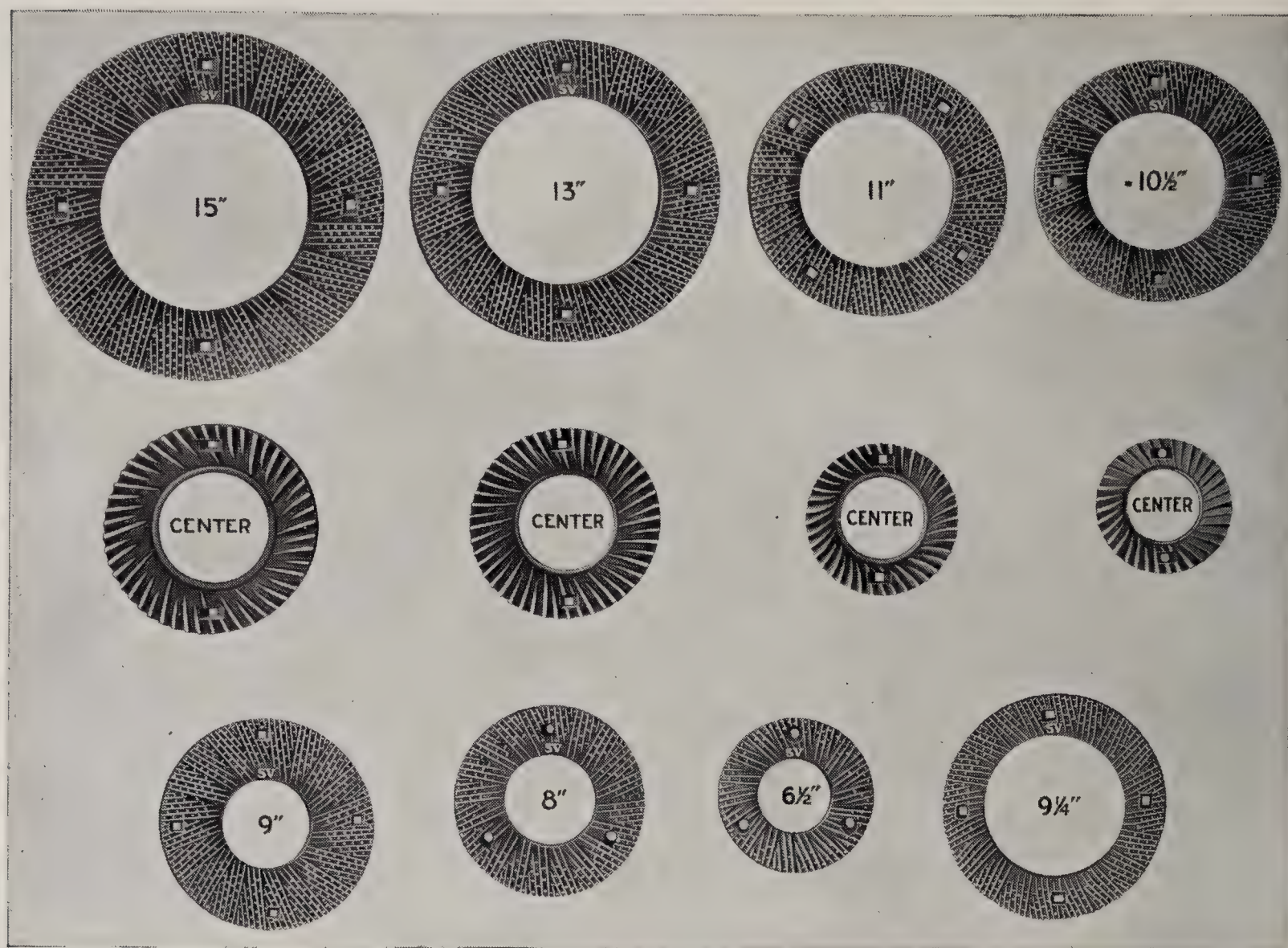
economical use and greater profits. Less power is required to grind, since friction is reduced to a minimum, which naturally increases the amount of feed which can be ground over that of plain-bearing grinders. In addition to the extra speed with which the work is done these grinders operate with scarcely any vibration whatever, thereby resulting in longer life.

These ball-bearing models are built along the same general lines as the plain-bearing machines previously described. They have the same strong, rigid base and efficient, long-wearing grinding plates characteristic of all Vessot grinders.





## Vessot Feed Grinders



*Illust. 8—Plates and corresponding centers supplied on Vessot Feed Grinders. The smaller grinders (6½-inch, 8-inch and 9-inch) have no centers, because their capacities are limited and the plates themselves can take care of the work.*

### Secret Process Plates

The plates, of course, are the parts that do the work of grinding and must be made in such a way that they will give good service without undue wear. Vessot plates are made of a special, high-grade, hard steel which is made up under a secret formula of many years' standing. A special cupola is used at the Vessot foundry for melting the steel that is used for the plates. Vessot plates are absolutely straight, and heavy enough to stand up under severe use. They are double sided and can be reversed when worn to give another new wearing surface. Great care is exercised in balancing these plates to see that they run true. Each and every plate is balanced by an expert who grinds off a little here and there until the balance is absolutely true. Balancing plates in this way costs money, but the manufacturers of these mills know that it is the only sure way to secure a smooth-running mill at high speed. A pressure screw and jam nut on the end of the main shaft can be adjusted to set the plates for grinding coarse or fine.

### Centers Do the Breaking

In the center of the larger plates there is a special ring or center which breaks up from 60 to 70 per cent of the grain. These centers relieve the plates of a large part of the hard work and result in finer and more completely ground feed.

The pressure lever by which the plates are brought together is a short rod with a ball on the end that can be operated instantly to draw the plates together or throw them apart. To get the grain to the plates rapidly a long, coarse worm or conveyor is used. Thus even at high speed a constant flow of grain is assured. This feature is not common to other mills, but is absolutely essential to secure full capacity.

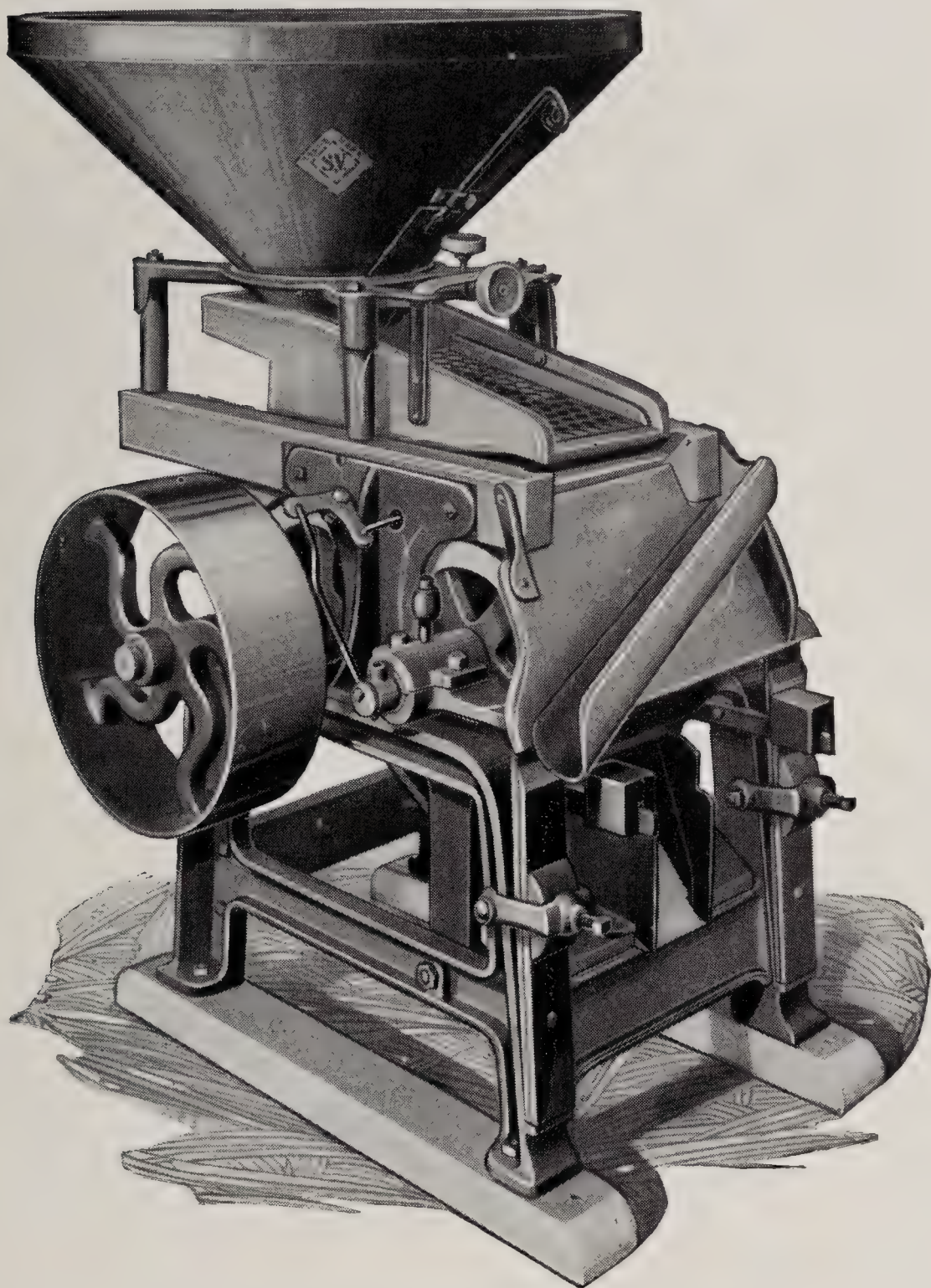
### Motor-Driven Vessot

For custom feed mills or farmers who have a large quantity of feed to grind every day, we have Vessot ball-bearing grinders equipped with self-contained direct-drive electric motors. These mills operate at a minimum cost where electric power can be secured cheaply and easily.





## Vessot Oat Crushers



*Illust. 9—Vessot Oat Crusher or Roller.*

In order to meet the demand in certain communities for a thoroughly satisfactory oat crusher, the machine shown here has been developed by the makers of Vessot grinders. Crushed oats has been found valuable as a horse feed particularly because it is rapidly assimilated in the digestive tracts.

The contruction of the Vessot oat crusher is strong and substantial. The base is made of high-grade iron and is solid enough to hold the crushing mechanism in perfect alignment. This machine also can be used to crush barley and other grain. There is no waste and the entire ration is utilized.

### Specifications—Vessot Oat Crushers

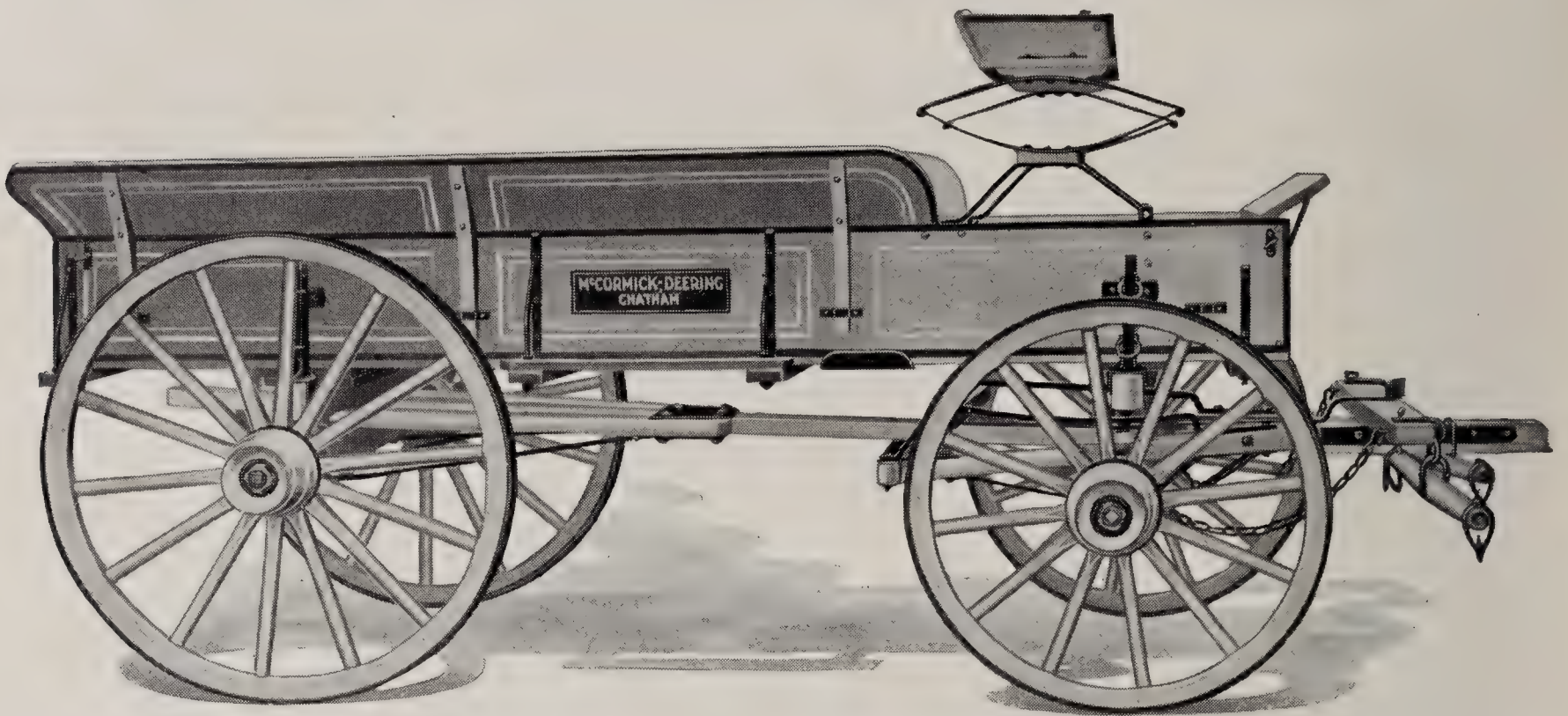
	No. 1	No. 2	No. 3
Weight.....	1,145 lbs.	795 lbs.	495 lbs.
Height.....	53 in.	51 in.	48 in.
Floor Space.....	3 ft. x 2½ ft.	2½ ft. x 2 ft.	2 ft. x 1½ ft.
Size of Pulley.....	18 in. x 5 in.	18 in. x 5 in.	14 in. x 5 in.
Size of Rollers.....	14 in. x 16 in.	12 in. x 14 in.	10 in. x 12 in.
Speed per Minute.....	435 to 500 Rev.	425 to 500 Rev.	500 to 550 Rev.
Power Required.....	8 to 10 H.P.	6 to 8 H.P.	3 to 5 H.P.
Capacity.....	40 to 50 Bushels	30 to 40 Bushels	15 to 30 Bushels

No. 4 Oat Roller is still smaller with a capacity of 10 to 15 bushels per hour.





## McCormick-Deering Chatham Farm Wagons



*Illust. 1—McCormick-Deering Chatham Farm Wagon equipped with the popular style of box used in Eastern Canada.*

### Backed By Long Experience

Chatham wagons have been built in Chatham, Ontario, for many years—so many that most of the wagon makers in the great Chatham Works have grown gray in the business of producing the highest grade wagon sold in the East.

There is just as much difference in wagons as there is in automobiles. Attractive appearance alone is not a safe guide in buying a wagon. It is easy to cover poor material and defective workmanship with a thick coat of paint, but after a short time on the road, under heavy loads, the weak spots soon show up and the bargain price paid does not look like such a profitable investment. Low price quite frequently means low quality. You can't scrape all the paint off a wagon when you buy it, so the safest thing to do is to select a wagon that has built up a lifelong reputation for quality, service, and satisfaction.

### We Hunt For It

Everyone knows that high-grade wagon timber is hard to get and becoming scarcer every year. In spite of these difficulties the makers of McCormick-Deering Chatham farm wagons have refused to lower the quality of their product by using inferior wood stock. As in the past, you may be assured that nothing but clear, tough hickory, maple, and oak will be used in the manufacture of these quality wagons.

### High Quality Throughout

The builders of McCormick-Deering Chatham farm wagons have always worked on the principle that they can't build all the wagons that are sold, so they will try to produce only the best. They believe that a wagon must have service built into it before the user can get service out of it. This enviable reputation for easy running and long years of satisfaction has been accomplished, not by cheap price or covering defective material with putty and paint, but by constantly striving to put into each wagon a dollar's worth of value for every dollar asked. Improvements and conveniences have been incorporated from time to time and the McCormick-Deering Chatham wagons offered to the trade at this time include many new features that will meet the approval of the farmer.

### Materials Used

McCormick-Deering Chatham hubs are made from carefully selected birch, turned, shaped, bored and mortised by automatic machines carefully adjusted to insure accuracy. Spokes are select hickory and oak with square shoulders which set down solidly on the hubs. Rims are bent from straight-grained oak which has been shaped when green and air-dried. A-grade material is used all the way through and results in a first-class wheel which will stand the hardest use.

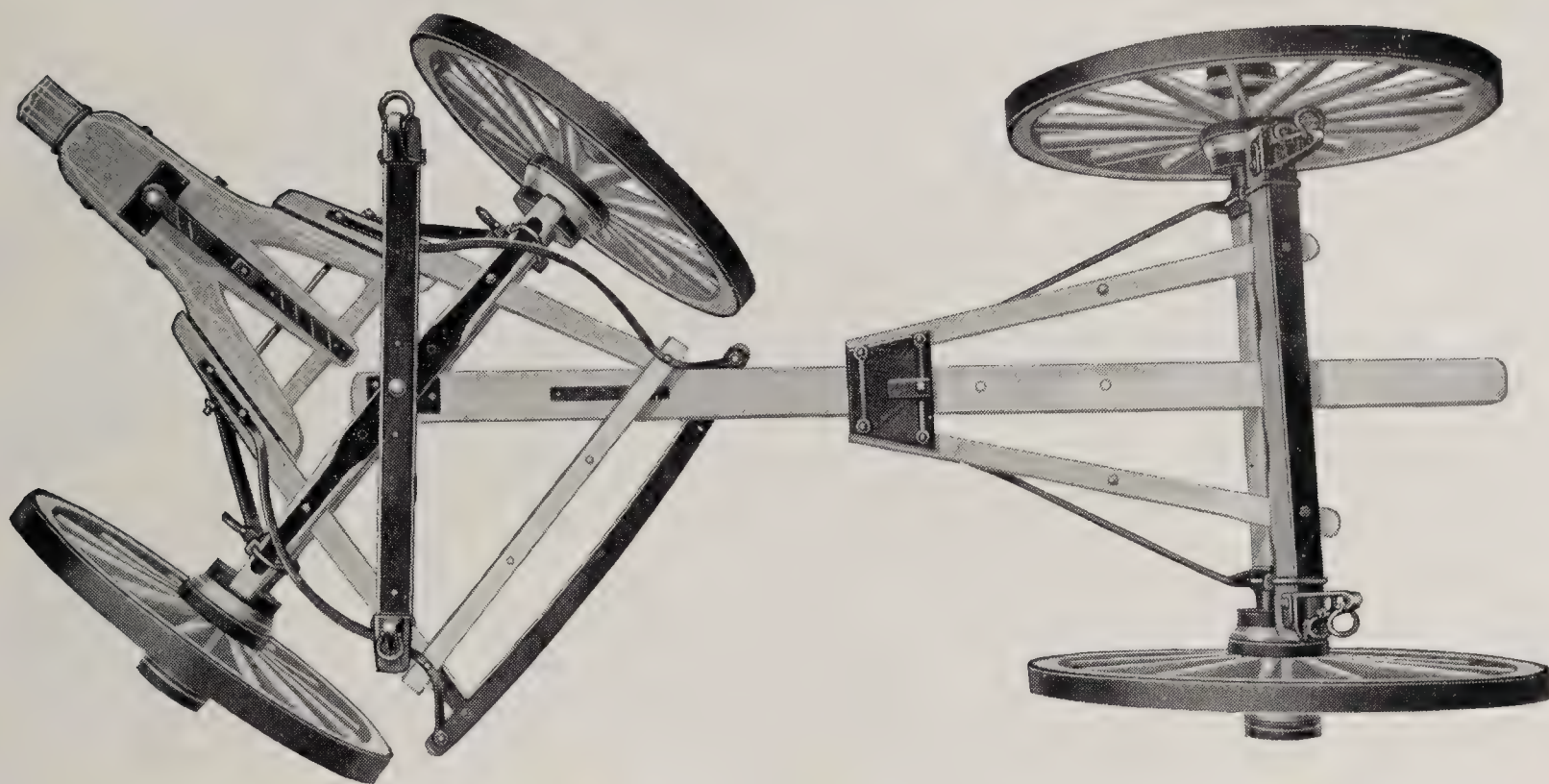
### Specifications—McCormick-Deering Chatham Wagons

Size of Skein	Track	Wheels			Wagon Box				Approx. Weight Gears "Medium"
		Low	Medium	High	Length	Depth Flare Box	Width of Flare	Depth Strt. Box	
3¼"	56"	40 x 44"	40 x 48"	44 x 52"	10' 6"	13"	8"	21"	833 lbs.
3½"	56"	40 x 44"	40 x 48"	44 x 52"	10' 6"	13"	8"	21"	959 lbs.
3¾"	56"	40 x 44"	40 x 48"	44 x 52"	10' 6"	13"	8"	21"	1213 lbs.

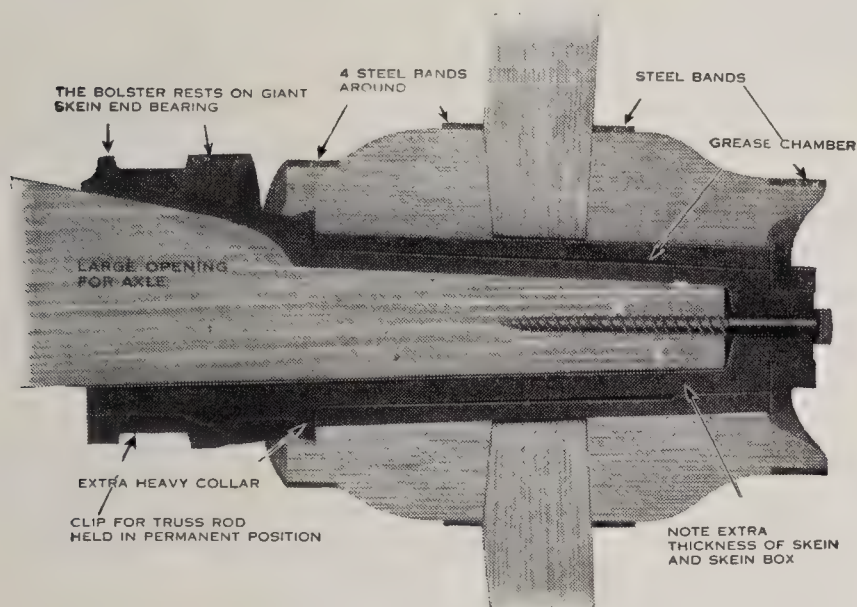




## McCormick-Deering Chatham Farm Wagons

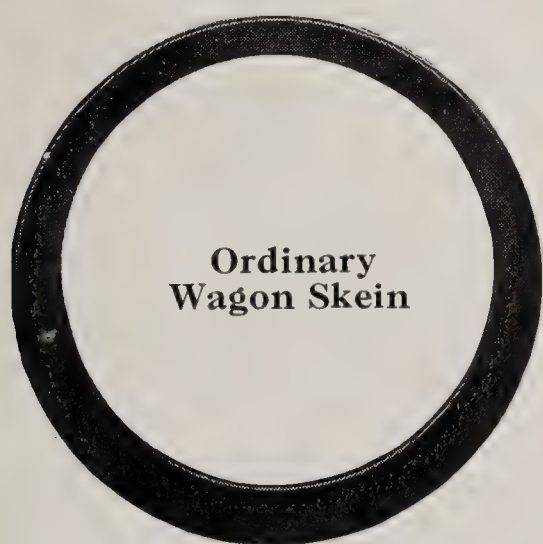


*Illust. 2—Looking at the Chatham gear from above. Simple, strong construction. Well ironed and braced throughout. Here is a gear that will last for many years on the average farm.*



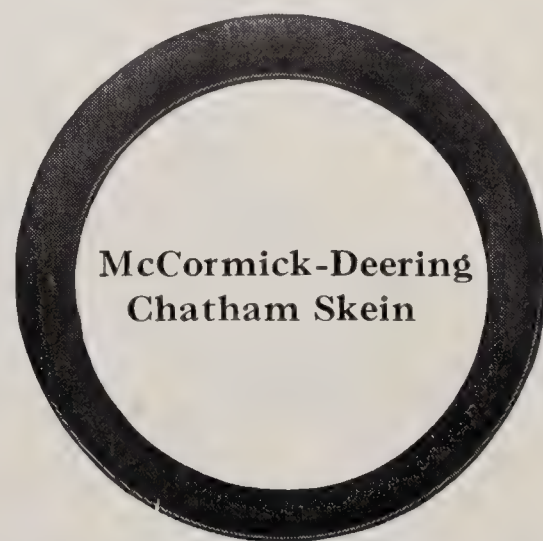
*Illust. 3—Here is a cross sectional view of the Chatham hub and skein. Oil cannot readily soak into the hub because of the large grease chamber between the skein and skein box.*

The illustrations on this page will give you some idea of the value that is built into McCormick-Deering Chatham wagon wheels and the gear as a whole. The value is apparent in later years after the wagon has been given hard use for a long time. The wheels will be found in good condition and ready for additional years of service. Not long ago we found a Chatham wagon that had been used continuously for thirty years and was still on the job every working day.



Ordinary  
Wagon Skein

A GOOD  
THICK  
SKEIN  
MEANS  
LONGER  
LIFE AND  
EASIER  
RUNNING



McCormick-Deering  
Chatham Skein

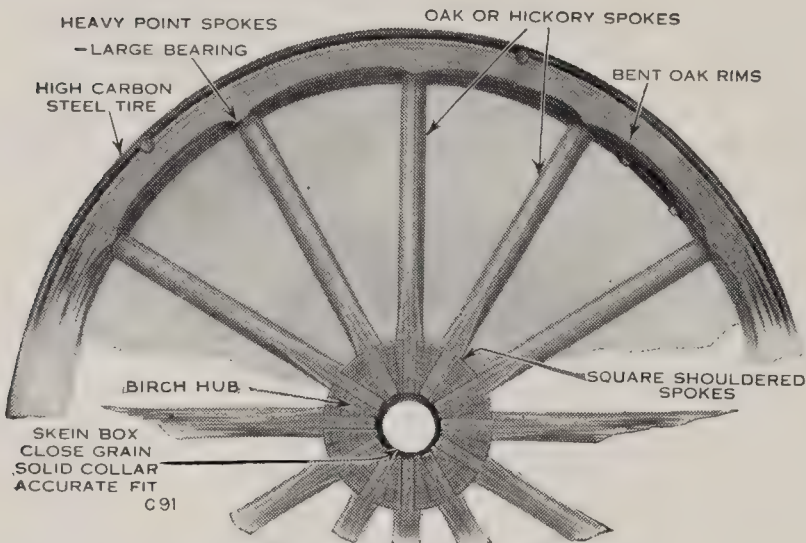
*Illust. 4—This is the way an ordinary skein would look when cut through. Note the walls which are too thin to give strength. This is not McCormick-Deering.*

*Illust. 5—The illustration above shows a McCormick-Deering Chatham "Giant" skein cut through. The generous size gives much longer wear.*

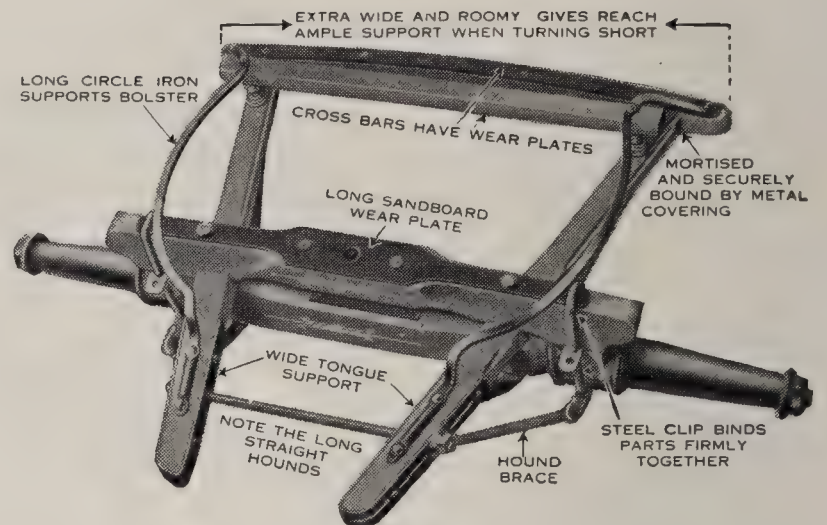




## McCormick-Deering Chatham Farm Wagons



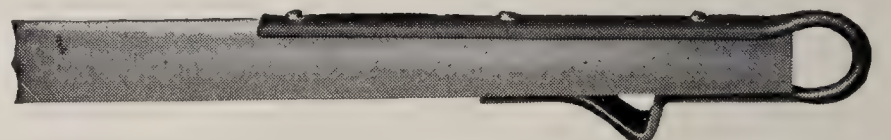
**Illust. 6**—Cross section of a Chatham wheel showing the manner in which the spokes are seated squarely on the hub. Tires are welded electrically and set hot.



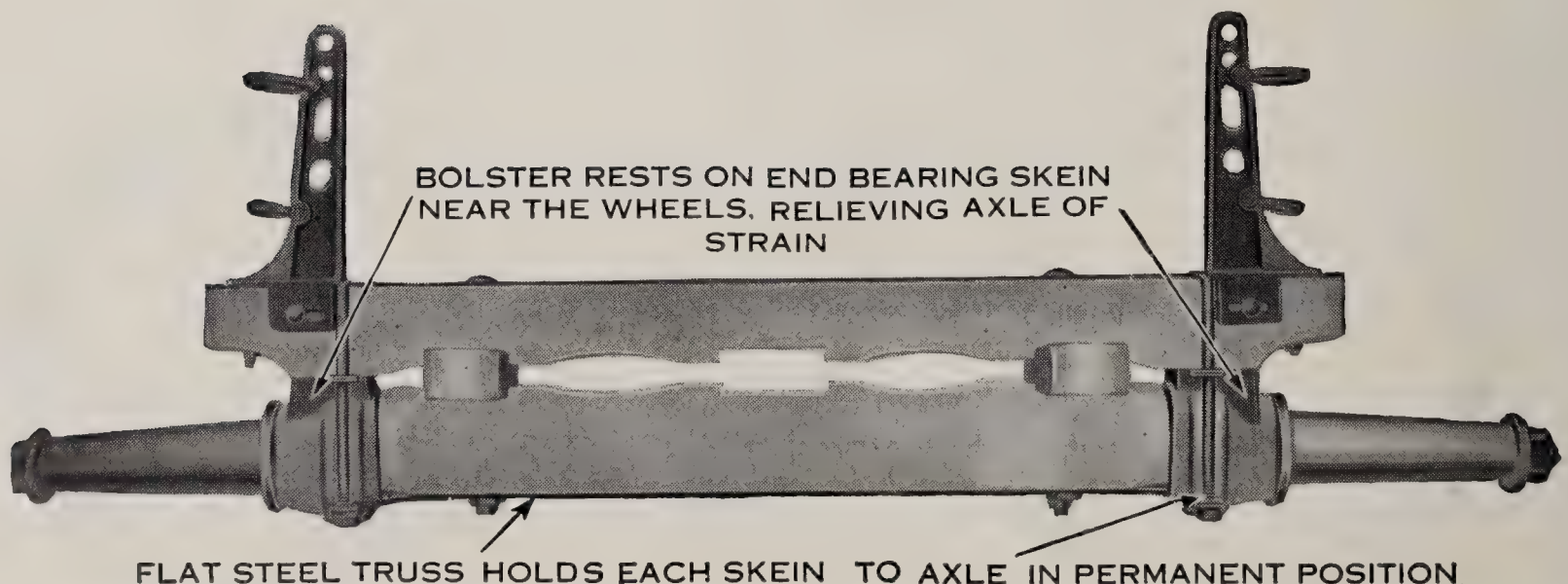
**Illust. 7**—Top view of front axle and hounds. Steel clips bind together the various parts to avoid boring unnecessary holes. Note the unusual length of the sandboard plate and liberal ironing of all parts.



**Illust. 8**—The Chatham tongue is made of straight grained oak with wide hounds at the rear. Hammer strap has an added support and the ironing is heavy throughout.



**Illust. 9**—Front end of the Chatham tongue is well protected with a heavy iron strap which terminates in a large loop.



**Illust. 10**—The strongest selling feature on Chatham wagons is the "Giant" end bearing skein. Note in the illustration above that the load is carried at the ends of the axle where they enter the skeins. This construction takes nearly all weight and strain off the center. So much so that half the axle could be cut away in the center and the axle would not break under a capacity load.





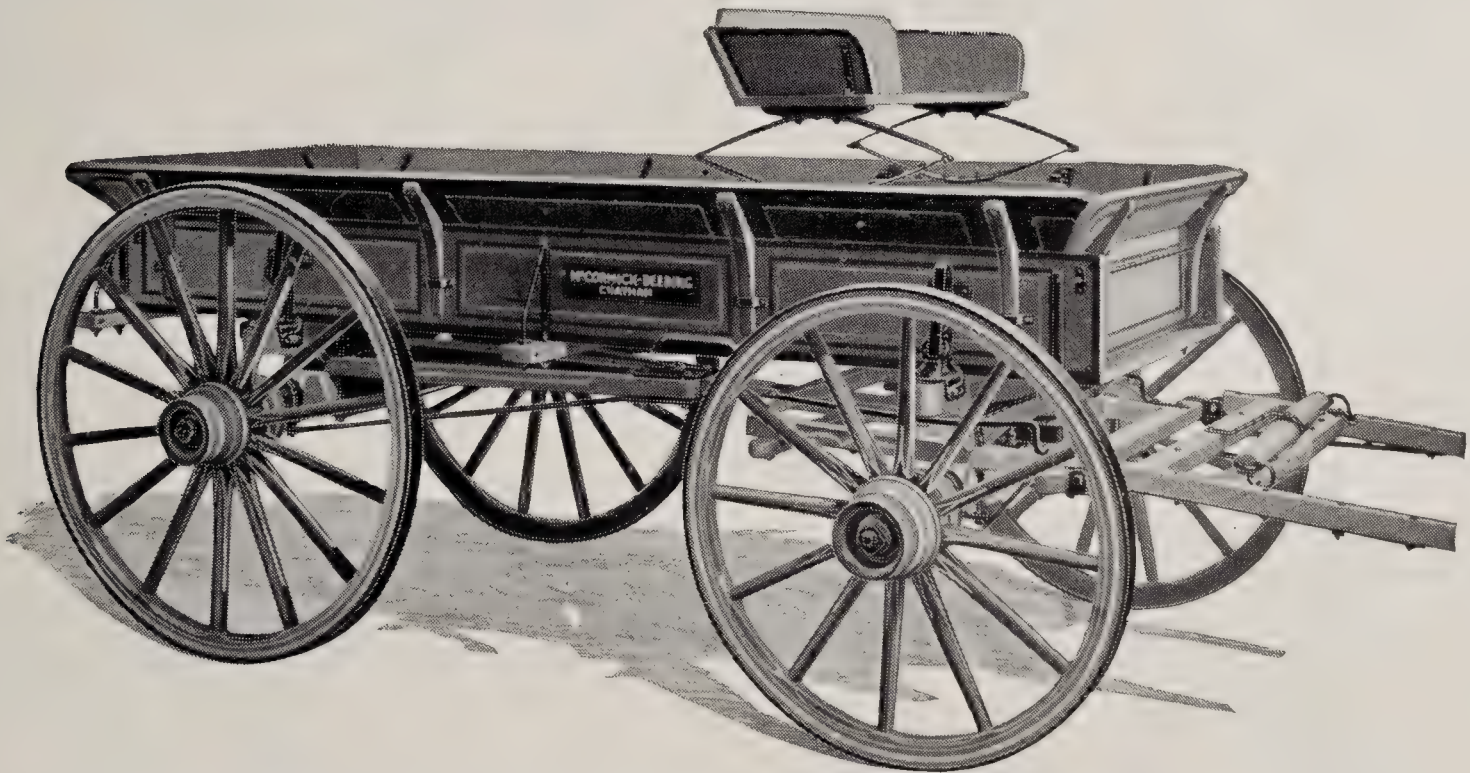
## McCormick-Deering Farm Wagons



*Illust. 11—McCormick-Deering Two-horse Steel Axle Wagon. Best of its kind made. Straight side, three-quarter flare or full flare boxes can be supplied.*

This high-grade McCormick-Deering Chatham wagon was designed especially for the farmers of Eastern Canada who prefer a steel axle wagon. The material throughout is the same as that used in the end-bearing skein type of wagon, excepting a  $1\frac{7}{8}$ -inch one-piece, solid-steel axle is used instead of wood. The gear and box are made of specially

selected A-grade wagon lumber and seasoned to correct dryness before being made up into parts. In building this wagon, the well-known McCormick-Deering Chatham standard of workmanship, finish and machine work is maintained throughout. It has more built-in strength than is generally required in a wagon of this size.



*Illust. 12—McCormick-Deering One-horse Cast Skein Farm Wagon. This gear also can be fitted with any desired type of box.*

This wagon is built in the standard 56-inch track with 40-inch front wheels and 48-inch rear wheels.

Tires are  $\frac{1}{2}$ -inch thick with rounded edges and are supplied in either  $2\frac{1}{2}$  or 3-inch widths. Bolster stakes are made of tough malleable iron and are adjustable for boxes from 38 to 40 inches wide.

The wagon is supplied regularly with 3-inch cast skeins and straight heel shafts. On special order,

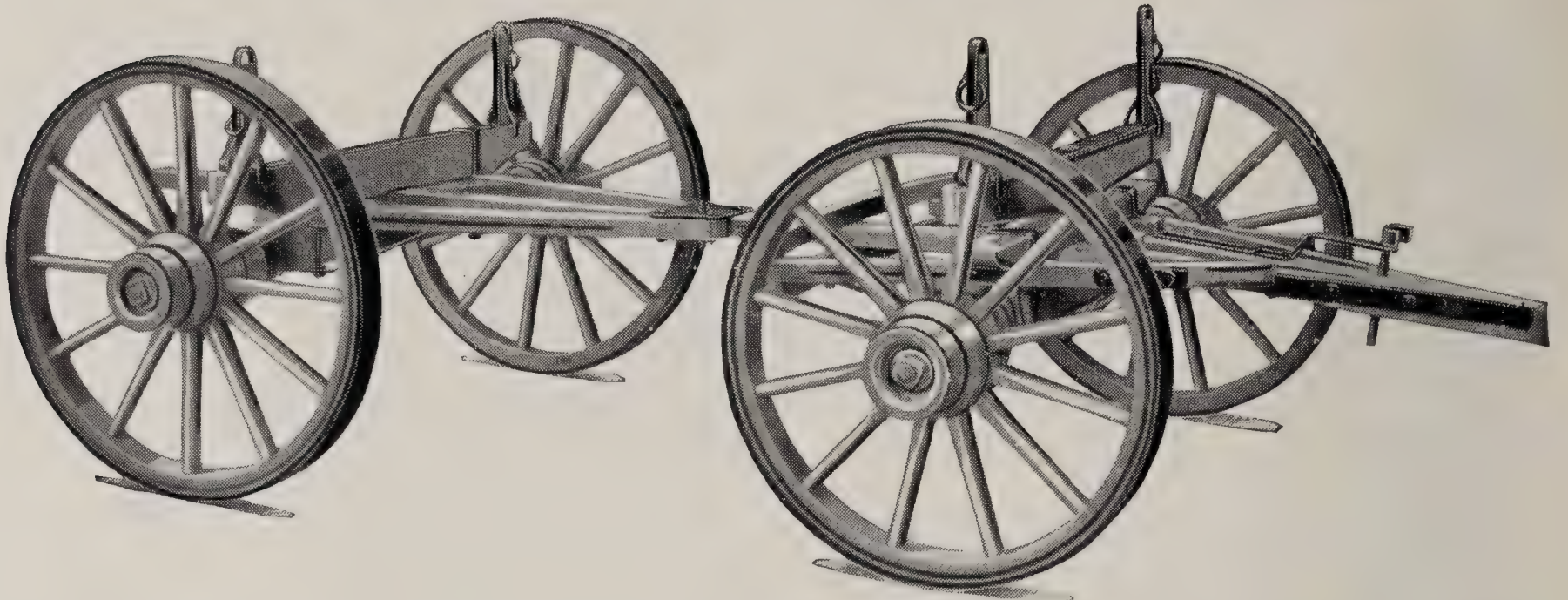
tongue, whiffletrees and yoke can be supplied instead of shafts.

The rear gear is fitted with long, straight, heavy hounds. A long round brace connects the heavy reach plates with the axle. Two short braces stiffen the gear, and strong steel clips bind the parts securely together. This is one of the best grade one-horse farm wagons in Canada.

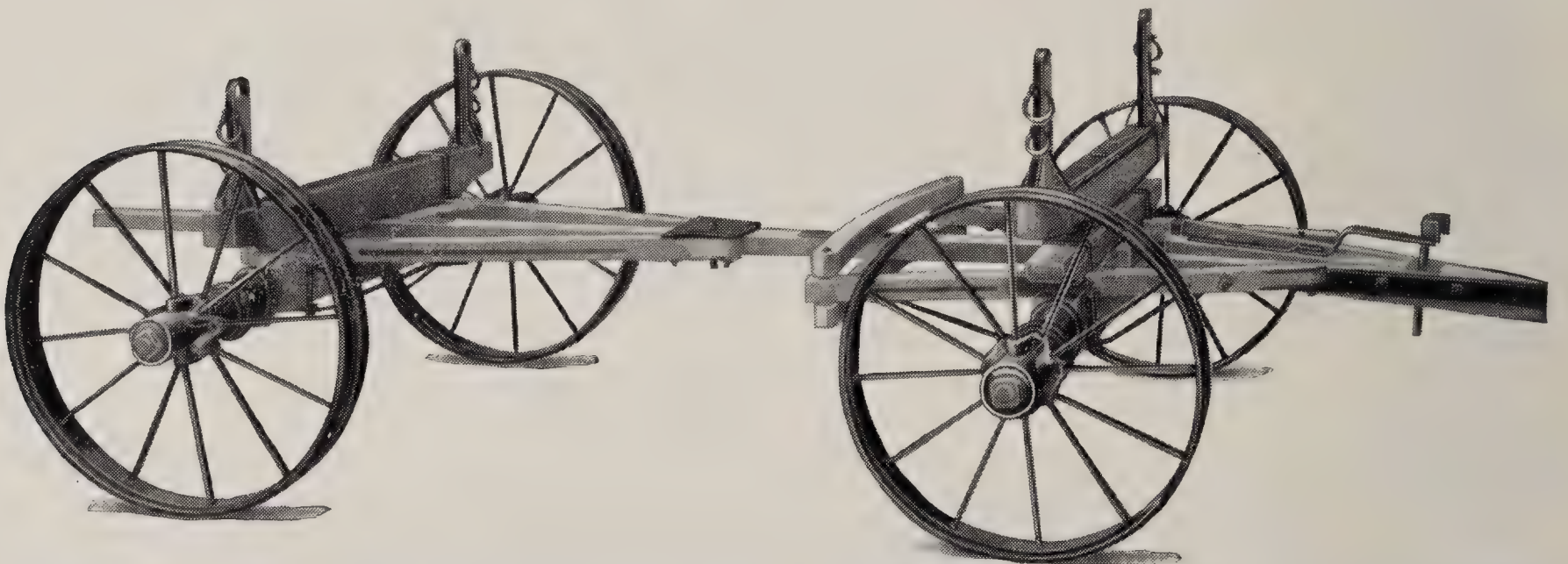




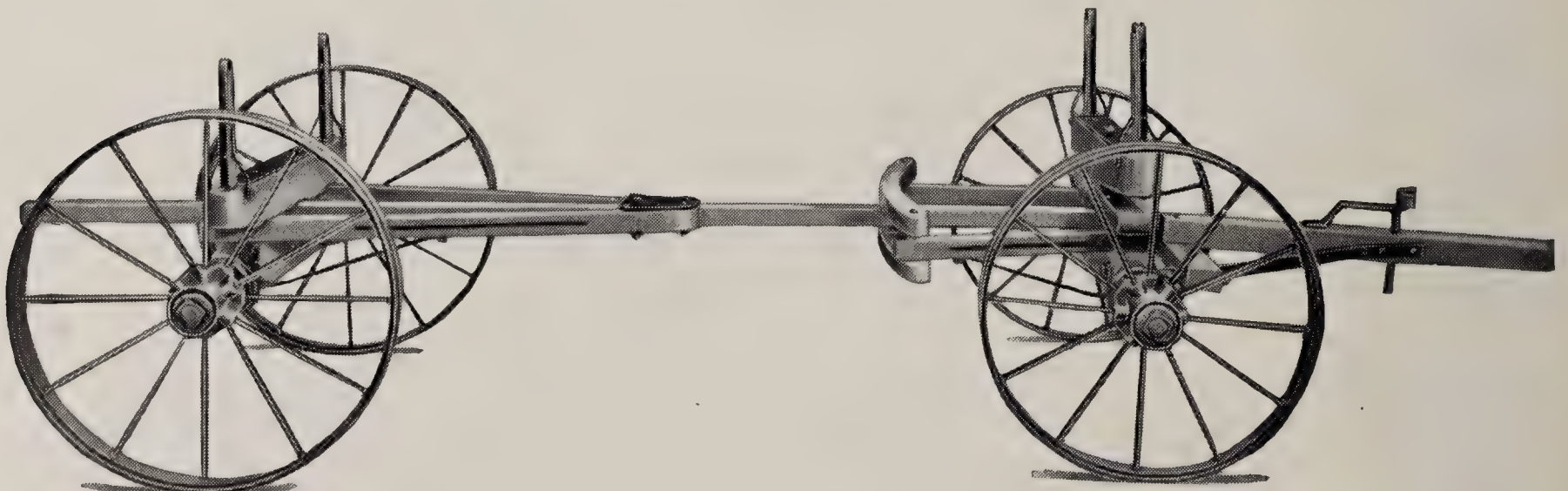
## Wood Wheel and Steel Wheel Farm Trucks



*Illust. 13 — New Climax Wood Wheel Farm Truck. Clipped gear;  $3\frac{1}{4}$ -inch skeins; full hounds. Wheels—36-inch front, 40-inch rear. This truck can be equipped with steel wheels as shown in Illustration 14 below.*



*Illust. 14 — New Climax Steel Wheel Farm Truck. Clipped gear of same strength and dimensions as that used on the wood wheel truck shown above. Steel wheels, 28-inch front, 32-inch rear, are interchangeable on the same gear with wood wheels shown above in Illustration 13.*



*Illust. 15 — New Monarch Steel Wheel Farm Truck. Lighter and less expensive than the New Climax, but well made and thoroughly braced, with full hounds. Steel wheels only—28-inch front, 32-inch rear.*

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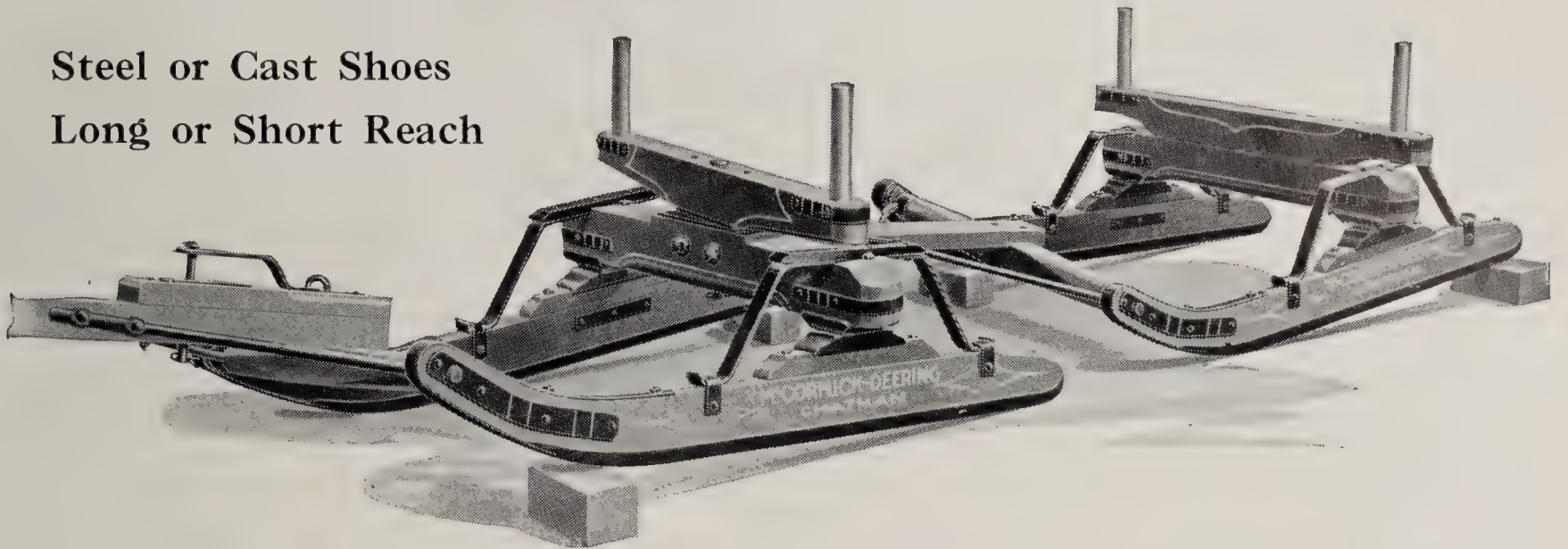
McCormick-Deering One-Horse Wagons with either steel or wood axles can be supplied. Sarven wheels 40 x 48. Regular wheels 40 x 44.



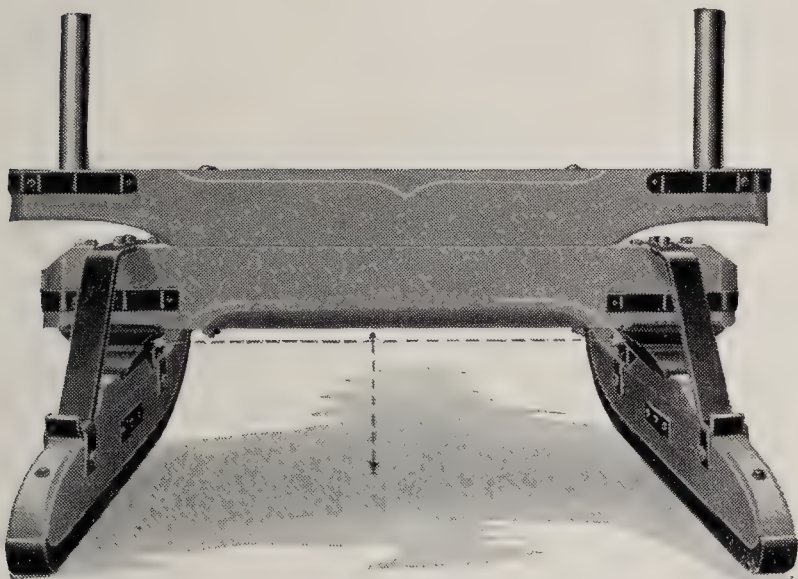


## McCormick-Deering Chatham Bob-sleighs

Steel or Cast Shoes  
Long or Short Reach



*Illust. 1—McCormick-Deering Chatham Sleigh with short reach and cast shoes. Note flexibility of runner connections.*



*Illust. 2—Rear view of rear bob showing extra high clearance on the road.*

### Clearance and Flexibility

The knee construction used in bracing each runner combines strength with flexibility in a way not found on other sleighs of this type. The load on a McCormick-Deering sleigh rests on a much greater portion of the runner, yet when you run over a stone or root the runner will ride over it without straining or twisting any other parts. There is exceptionally high clearance under the beam in order to pass stones or obstructions on the road.

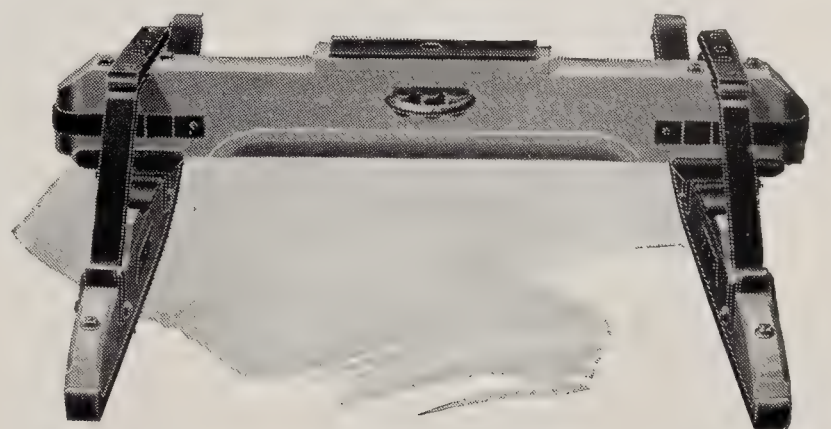
### Curved Runners

Clear, straight-grained oak is carefully inspected, boiled in water, and then bent to the correct curve in a powerful bending machine. Only the very best of wood stock could undergo this bending operation. Compare McCormick-Deering runners with the runners used on sleighs which sell for less money. You are likely to find that the runner on the low-priced sleigh is not bent at all but just sawed out of two pieces.

### Two Types

McCormick-Deering sleighs are built in two types—with steel or cast shoes, also with long or short reach.

Width between bolster stakes—38 inches or 40 inches, as ordered. Stakes are removable. Track is 3 feet from center to center.



*Illust. 3—Rear view of front bob showing strong ironing and reach connection.*

### Specifications—McCormick-Deering Sleighs

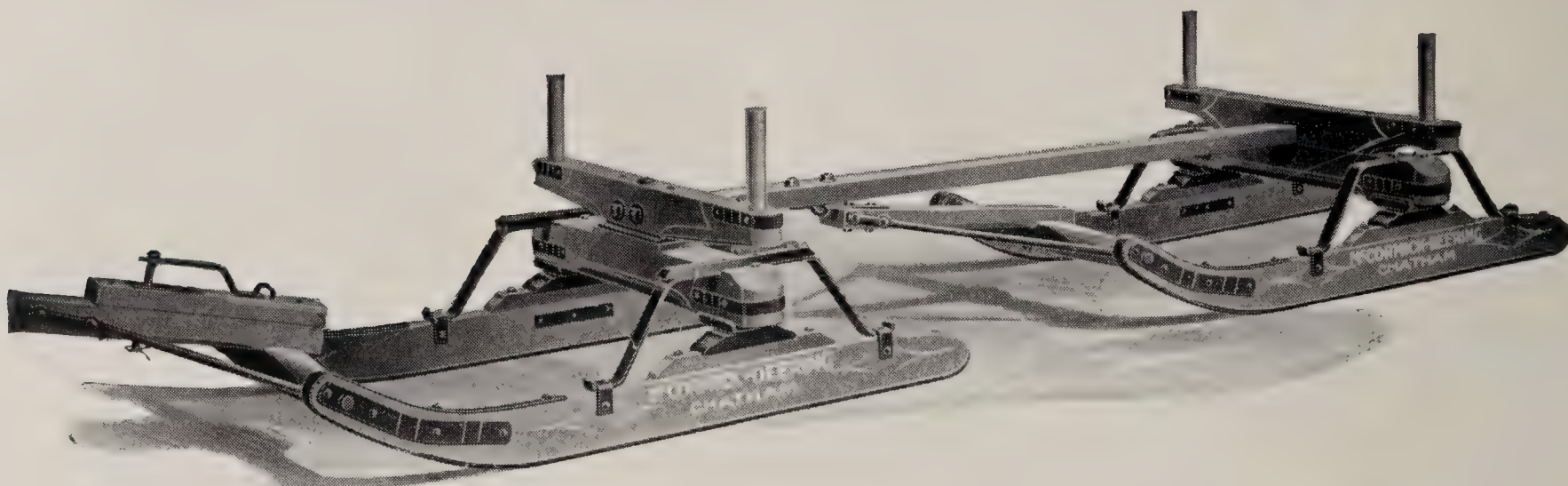
Style	Size		Runners	Depth		Height from Ground to Top of Bolster		Size of Wood Used In		Weight	
	Steel Shoe	Cast Shoe		Steel Shoe	Cast Shoe	Steel	Cast	Bolsters	Benches	Steel Shoe	Cast Shoe
(30A)	2 x $\frac{3}{8}$ "	2 x $1\frac{1}{4}$ "	6'	5 $\frac{1}{2}$ "	6 $\frac{1}{4}$ "	20"	21"	3 $\frac{1}{2}$ x4 $\frac{1}{2}$ "	5 $\frac{1}{4}$ x5"	475 lbs.	575 lbs.
(31A)	2 $\frac{1}{2}$ x $\frac{3}{8}$ "	2 $\frac{1}{2}$ x $1\frac{1}{4}$ "	6' 6"	5 $\frac{1}{2}$ "	6 $\frac{1}{4}$ "	20"	21"	4x5"	5 $\frac{1}{4}$ x5"	500 lbs.	600 lbs.

EXTRAS—Log bunks, 5 feet or 5 feet 6 inches, trees and yoke; track 3 feet.

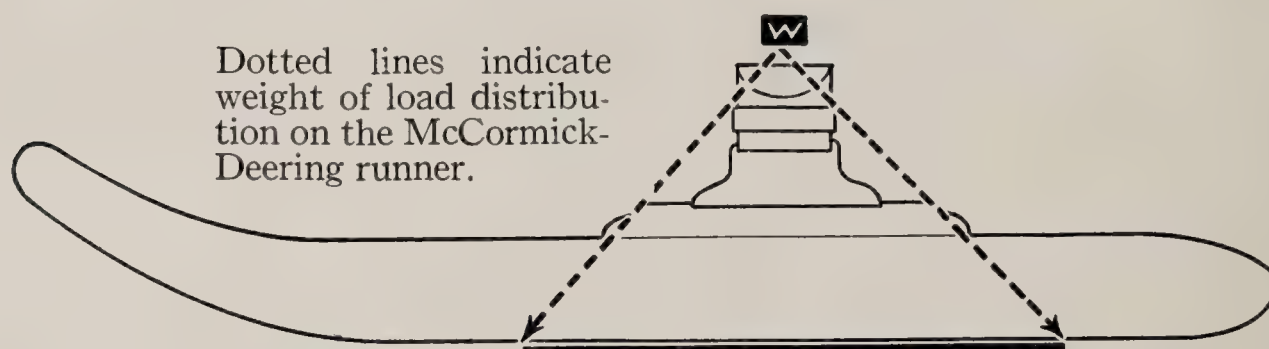




## McCormick-Deering Chatham Bob-sleighs

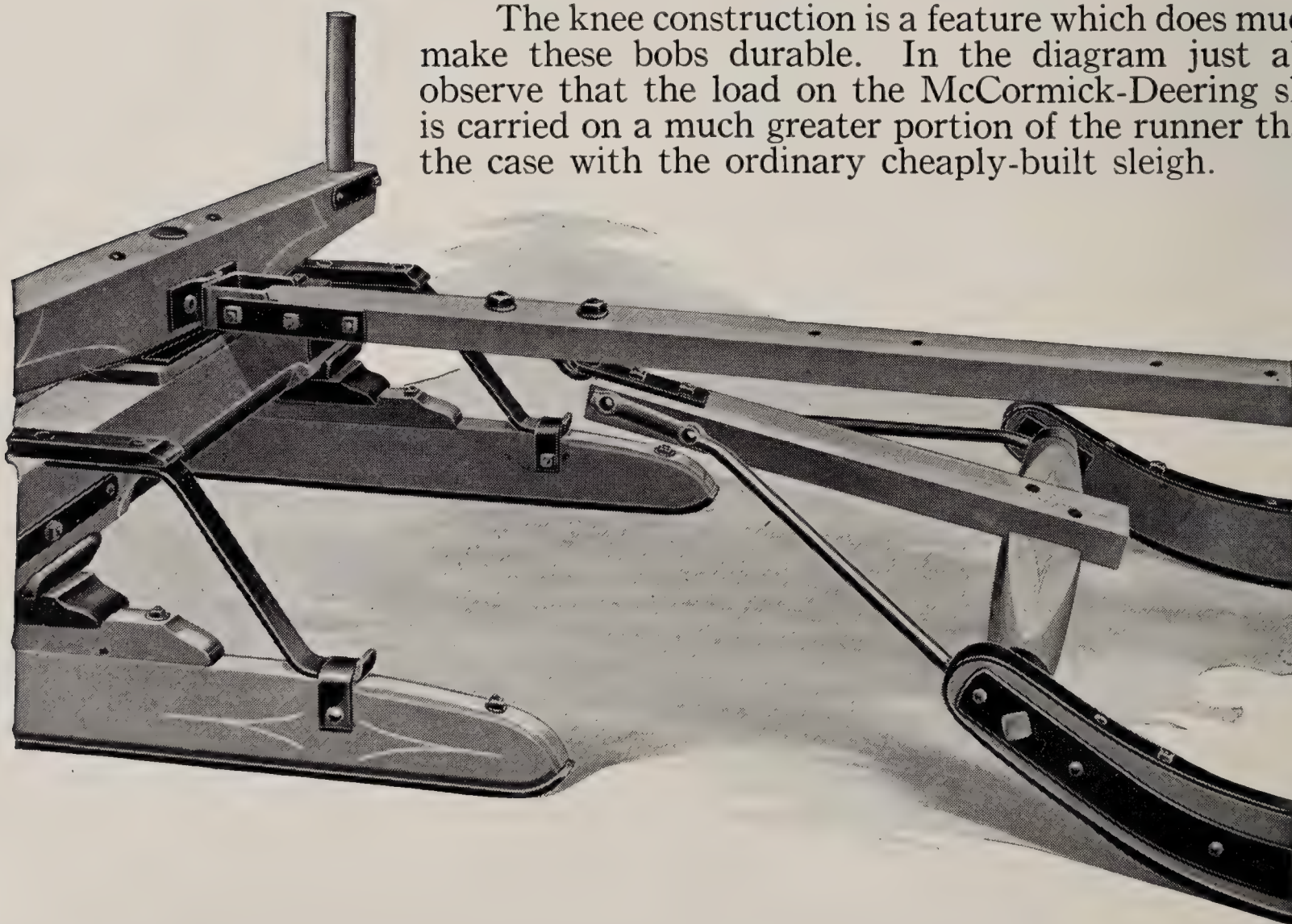


*Illust. 4—McCormick-Deering Chatham Sleigh with long reach and steel shoes.*



*Illust. 5—The McCormick-Deering Runner*

The knee construction is a feature which does much to make these bobs durable. In the diagram just above observe that the load on the McCormick-Deering sleigh is carried on a much greater portion of the runner than is the case with the ordinary cheaply-built sleigh.



*Illust. 6—Detail view showing reach connection between two bobs when long reach is used. It is especially designed to allow perfect freedom of all parts in traversing rough ground. There is no twisting or straining of parts. Reach is well-ironed and provided with adjustments for lengthening or shortening the distance between the bobs. An extra large size kingbolt is used through the front bolster. A cotter pin at the lower end holds it in place and a steel plate on the under side of the beam prevents wear on the wood.*





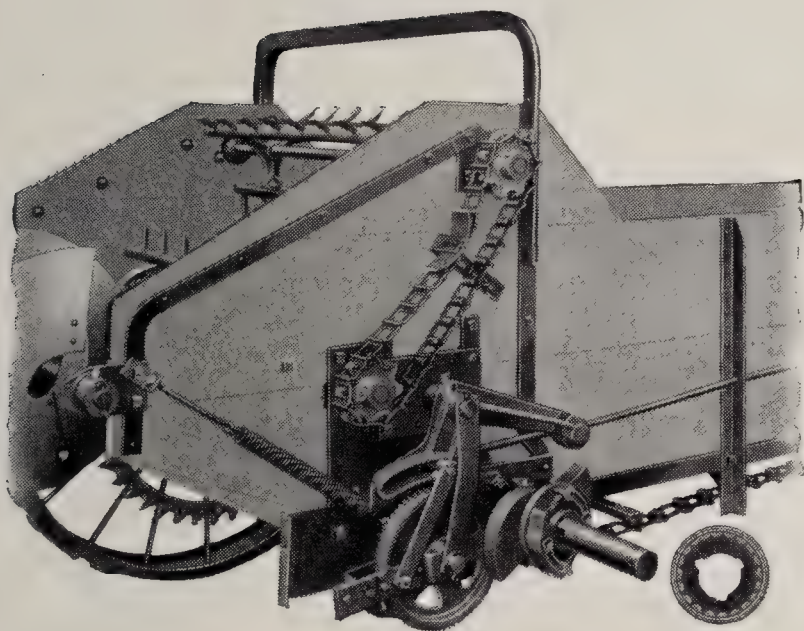
## McCormick-Deering Manure Spreader



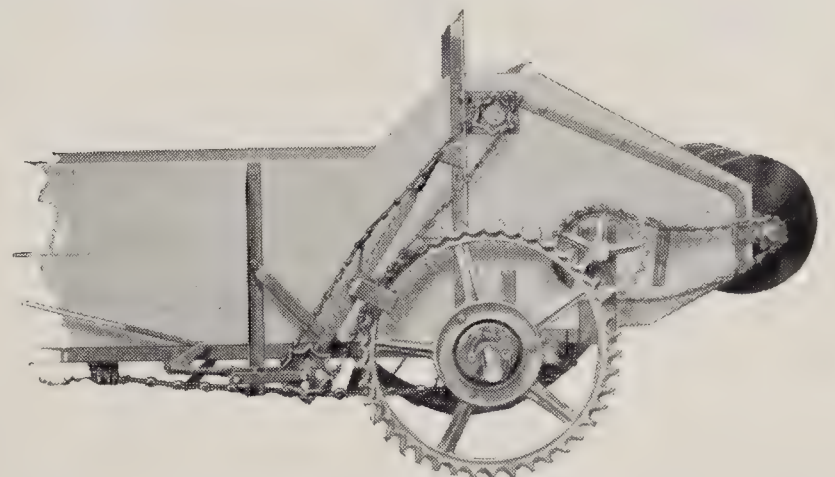
*Illust. 1—McCormick-Deering manure spreader. A light draft, conveniently operated machine that will find favor on farms of all sizes. Two-horse hitch is regular, but three-horse hitch can be supplied on order.*

### One Convenient Size

The McCormick-Deering manure spreader is built in one standard size with a capacity ranging from 57 to 67 bushels, depending on the height to which it is loaded. Box can be loaded to the top of the arch. Double beater takes care of uneven loading. Six different feeds are provided to make it possible to spread thick or thin, as desired. Seat is hinged and can be folded forward when loading, which serves to keep it clean.



*Illust. 2—Rear end of spreader showing ratchet feed that gives a steady backward motion to the drag conveyor. Box is tilted to the rear, which permits gravity to assist in sliding the load to the beater.*



*Illust. 3—Left side of spreader showing large driving sprocket which transmits the power to the beater by means of a strong chain. Box is well braced with angle steel and will not warp or get out of alignment.*



*Illust. 4—One reason for the exceptionally light draft of the McCormick-Deering manure spreader is the polished steel rear axle. It is extra large and will not bind or bend. Two roller bearings carry all the friction of the rear wheels and are enclosed in dust-proof housings. There are no holes drilled in the shaft to weaken it.*

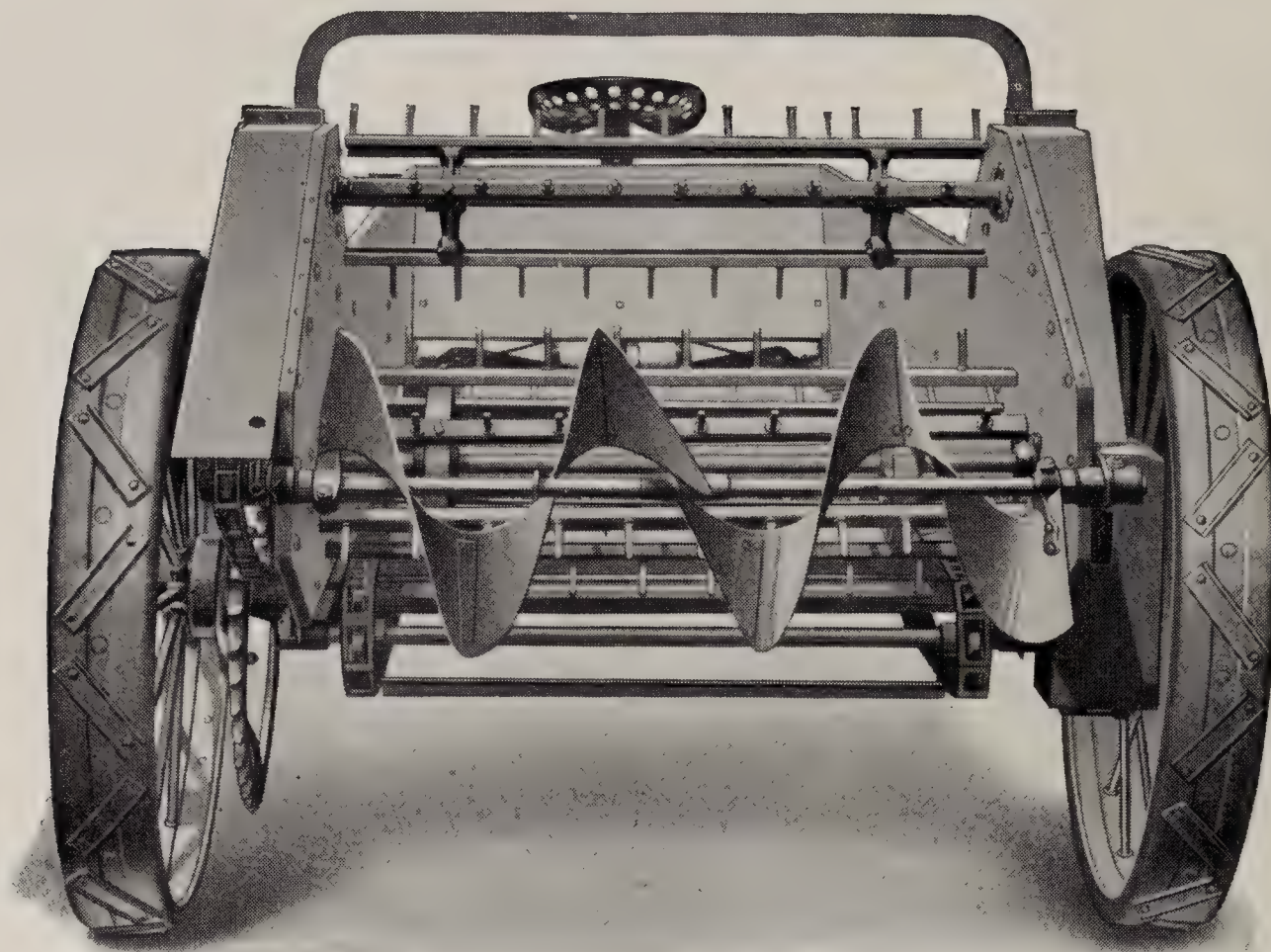
### Specifications—McCormick-Deering Manure Spreader

Description	Width Over All	Capacity	Weight	Regular Equipment	Extra Equipment
One Size	6 feet 1 inch	57 to 67 bushels	1400 lbs.	Two-horse hitch Tight bottom with drag conveyor	Three-horse hitch Tractor hitch Brake Attachment





## McCormick-Deering Manure Spreader



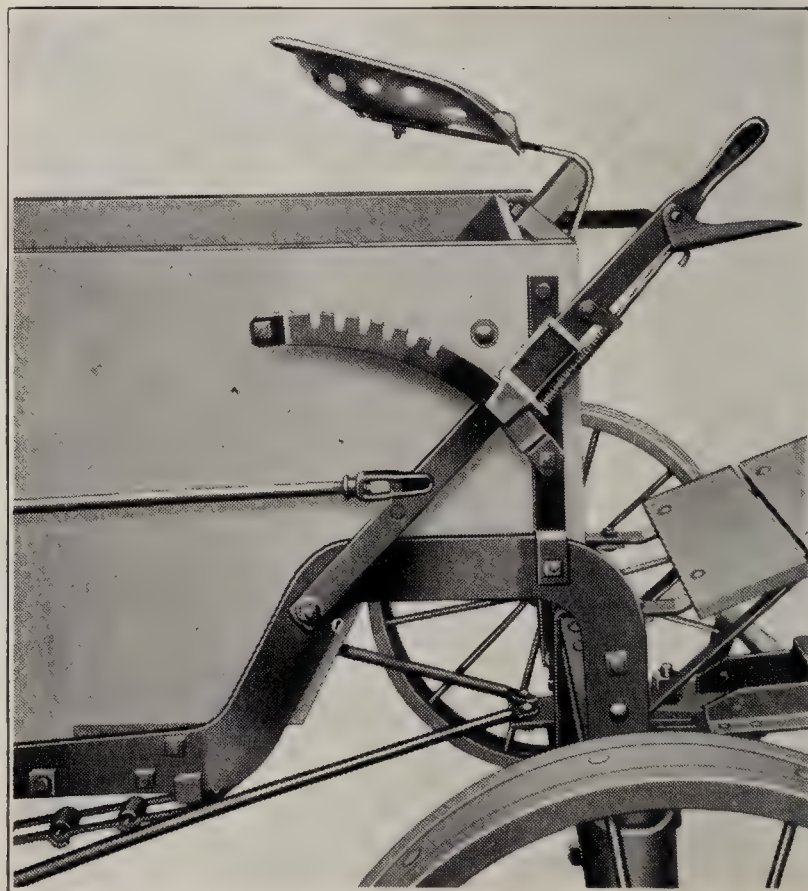
*Illust. 5—Two steel beaters pulverize the manure, after which it receives a third beating and is spread out evenly beyond the wheels by the widespread spiral. This results in a perfectly uniform distribution, which is the secret of successful fertilization of the soil.*

### The Widespread Spiral

The McCormick-Deering is a genuine manure spreader, and not merely a mechanical unloader. The patented widespread spiral gives the manure an even spread over a wide area.

This spiral is different from all other widespread devices. The patented feature is the scientific manner in which the metal is cut and shaped so as to form a continuous reverse curved spiral that increases in diameter from the center to the ends. It is the only wide-spreading device that is a rotary spiral. In action it whirls rapidly and continuously, performing two functions: First, it gives the manure an extra cutting and shredding as it comes from the upper and lower beaters; second, it spreads the manure evenly over a wide surface, thinning out beyond the tread of the wheels. On the returning or next round the spreads overlap, so that there is an even and uniform coating over the entire field. In this manner the wheels do not travel over freshly spread manure, and the lugs on the tires are not likely to fill up, which might cause the wheels to slip.

The spiral is self-scouring because the surface is a continuous curve which sheds the manure. It differs from other devices made of flat paddles, against which the manure is thrown and sticks and accumulates until it is thrown off in chunks. This patented, perfected and successful widespread spiral is supplied as regular equipment.



*Illust. 6—Showing the feed lever in a neutral position. There are six speeds which may be selected while the machine is in operation. Pulling back on the lever increases the speed of the spreading mechanism.*



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